

Definition of Pandemic on the WHO website



"... Sometimes you get the feeling that there is a whole industry almost waiting for a pandemic to occur ..."
Dr Tom Jefferson. Spiegel International, 21 July 2009

DEFINITION OF PANDEMIC ON THE WHO WEBSITE

a collection

of articles, documents, news, and remarks
on the history of changing the definition of a
pandemic on the WHO website

Hidden Stories

2023

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Disclaimers

This Collection was compiled by Dr. Mikhail Teppone.

It was prepared in the course of research on Swine Flu Pandemic that was declared in 2009.

The need for this collection is due to the fact that many web pages with the information related to the history of the 'Definition of Pandemic on the WHO website' have been removed from the original sites and were preserved only in the web archive or on a third party websites.

The Collection has been prepared for research and education purposes to encourage further studies related to influenza pandemics that have occurred in the XXI century.

The Collection includes information that was found in the public domain only.

The Compiler declares there is no conflict of interests or any financial interest.

2023 – M. Teppone.

Definition of Pandemic on the WHO website: A Collection of articles, documents, news, and remarks on the history of changing the definition of a pandemic on the WHO website. – *Hidden Stories*, Malaysia, July, 2023, pp. 160. DOI: 10.13140/RG.2.2.11046.29760/1

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UNIVERSAL TREATMENT OF ACUTE INFECTIOUS DISEASES



<https://archive.shine.cn/sunday/now-and-then/%E5%BC%A0%E4%BB%B2%E6%99%AF-Zhang-Zhongjing-circa-AD-150219-Plague-prompts-doctors-work/shdaily.shtml>

Universal treatment of acute infectious diseases

Mikhail Teppone

The phase dynamics of the COVID-19 pandemic: a systematic analysis of 213 Countries and Territories

Probl Soc Gig Zdrav Istor Med, July 2022; 30 (3): 347-355

DOI: <http://dx.doi.org/10.32687/0869-866X-2022-30-3-347-355>

1.2. Infectious disease is a battle between the human body's defense and viruses or bacteria

History of the battle against viruses and bacteria dates back at least several thousand years. Ancient physicians already knew about external pathogens which could cause acute febrile diseases. They also knew that an evolution of any clinical case depended on the health status of the patient before the onset of the disease, so they talked about «body defense». At the beginning of modern microbiology, the importance of body resistance was confirmed by a Prof. Max von Pettenkofer, who swallowed the entire contents of a tube filled with germs of cholera, but nothing happened to him. So, he claimed: «*The important thing is the disposition of the individual!*».¹

Despite a variety of external pathogens, the human body has a limited number of defense mechanisms, which is accompanied by a few clinical syndromes, consisting of common symptoms, such as fatigue, chills or hot feeling, headache, cough, shortness of breath, nausea, vomiting, diarrhea, skin rashes or discoloration of the skin, etc.

In ancient times the mechanism of the onset of fever was differentiated into two main groups (*hot & cold*) based on the presence of thirst, sweating, chills, or feelings of heat; and the choice of individual treatment was determined by the type of fever. According to the modern view on fever, which commonly accompanies infectious diseases, one can define only two mechanisms leading to an increase in temperature: one is an increase in heat production (a *cold* type) and the other, a decrease in heat transfer (a *hot* type), or their combination.² Thus ancient and modern explanations of fever are quite similar, and two types of antipyretic medicines are necessary and sufficient to manage any case of excessive fever. Similarly, 2–3 mechanisms can be identified that underlie each of the remaining symptoms of any acute viral disease, so, a small group of commonly used drugs would be sufficient to manage any infectious diseases, including *old* and *new* ones.

After the discovery of bacteria and viruses as a cause of infectious diseases, the main emphasis was changed from supporting the body resistance to the fighting against pathogens. It was successful in the majority of bacterial infection cases, but it was almost useless when disease was caused by a virus.

Therefore, if there is no etiotropic treatment, then there is no need to identify a new viral disease. All pharmaceutical and non-pharmaceutical therapeutic modalities would be addressed to the well-known protective mechanisms of the human body, and treatment should be based on the leading syndromes and symptoms, using the principle called *off-label* therapy.

1.4. Treatment of patients suffering from acute infectious diseases

About 1800 years ago, Dr. Zhang Zhongjing summarized the results of research from previous generations and developed a theory of acute infectious diseases, which explained therapy based on leading clinical symptoms and syndromes.³ According to this theory, there could be only 6 phases, and certain phases could have 2–3 variants. Thus, the whole variety of clinical syndromes related to infectious diseases was limited to 10–12 variants, each having specific treatment and prevention.

There are some examples of treatment of the initial phases of infectious diseases: in the case of initial fever with general cold feelings without sweating – *Herba Ephedrae* was recommended; if there is initial fever with general hot feelings – *Folium Mori Albae* or *Herba Menthae Haplocalycis* should be used; if there is initial fever with intensive sweating or tension in the muscles – *Ramulus Cinnamomi Cassiae* was recommended; in the case of fever with alternating cold and hot feelings – *Radix Bupleuri*, was used, etc. A change in symptoms pointed to a change in the phase of the disease and required an adjustment of therapy. If a patient has a severe fever with hemorrhagic symptoms, skin rashes, kidney and liver impairment, delirium, etc. – *Radix of Isatis tinctoria* should be applied.⁴

(a) Phases of Defense System Affection	(b) Six Phases of Acute Infectious Diseases	(c) General Adaptation Syndrome by H. Selye
Activation of defense	1. <i>Tai Yang</i> - Common cold symptoms	} Alarm Phase
Unstable phase	2. <i>Shao Yang</i> - Unstable phase	
Highest activity of defense	3. <i>Yang Ming</i> - Progressive fever	
Exhaustion of defense {	4. <i>Tai Yin</i> - Beginning of exhaustion	(Adaptation Phase)
	5. <i>Shao Yin</i> - Hemorrhagic and other	} Exhaustion Phase
	6. <i>Jue Yin</i> Complications	

Theories which describe phase evolution of acute infectious diseases:

- (a) Four phases of defense in a case of disease caused by "excessive heat".⁵
- (b) Six phases of diseases caused by either "cold" or "heat", or "wind".³
- (c) Three phases according to the general adaptation syndrome theory discovered by Hans Selye.⁶⁻⁸

...

During later centuries, protocols of infectious disease treatment were updated according to the new scientific discoveries of that time. Excepting deadly epidemic diseases (plague, smallpox, or cholera), therapy of other infectious diseases was effective and successful.

Theoretically, modern medicine having a long history in the past and advanced pharmaceutical science nowadays must be able to treat any problem more effectively than our predecessors, but the helplessness of the modern medical system during the current pandemic (2019-2022) was beyond common sense, and raised questions about the quality of education of the distinguished medical leaders and their followers.

...

As far as acute infectious diseases are concerned, their pathological condition is not stable, but has several phases. Each of the phases requires the use of different medicines and patient care. It would be illogical to look for the treatment of COVID-19 in general, when each phase of the disease requires an appropriate group of medicines. Then a doctor should choose one or two medicines, taking into account the main symptoms of a certain patient.

Multiple attempts to find a unique medicine against 'COVID-19' have failed. That suggests that treatment of COVID-19 or any further new acute viral infectious diseases should be managed by means of routine drugs applied as *off-label* therapy.

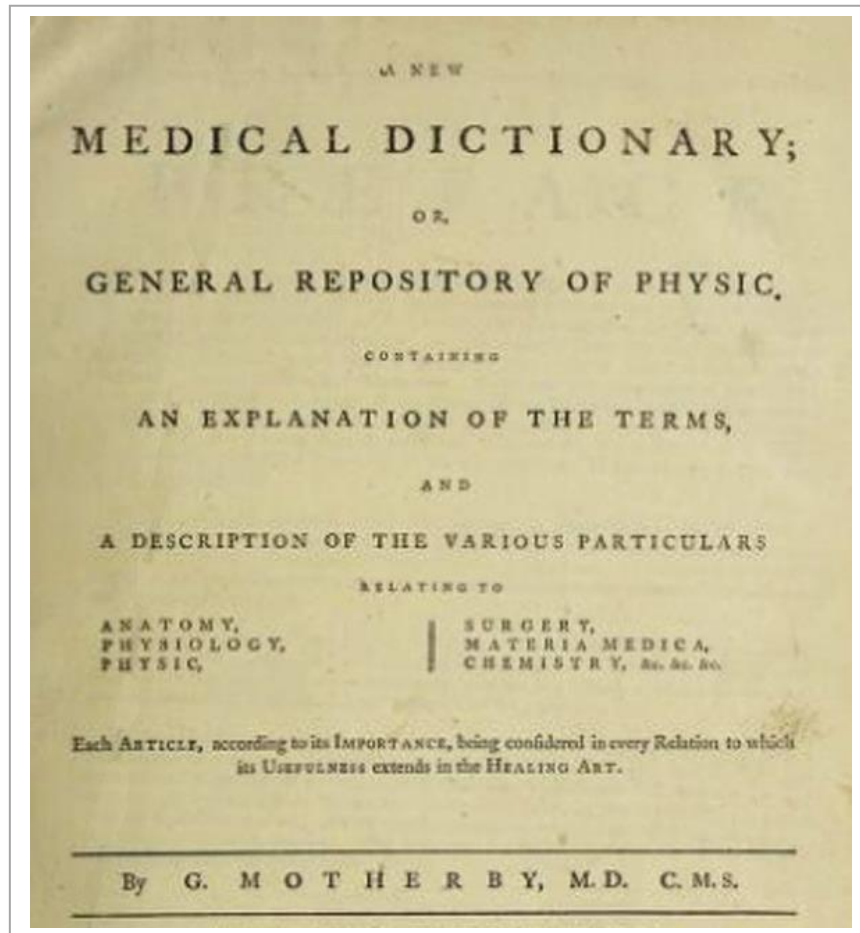
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Part 1

DEFINITION OF PANDEMIC IN THE WHO DOCUMENTS (1999-2017)





Motherby G. A New Medical Dictionary; or, General Repository of Physic, 3rd ed.
London: Printed for J. Johnson, 1791

EPIDEMIUS, from *επι*, upon, and *δημος*, the people. EPIDEMICAL, also EPICHORIOS. An epithet of diseases which at certain times are popular, and attack many people at the same time. A disease which appears, and generally prevails, then for a time disappears, is also called *epidemical*. See Obs. on Epidemic Disorders, &c. by James Sims, M. D. Dr. Wallis's Sydenham.

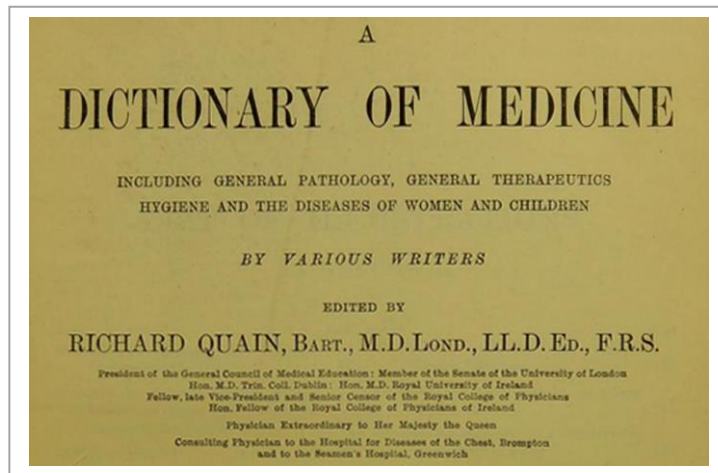
Epedemius, p. 341

<https://archive.org/details/b30451772/page/341/mode/1up>

PANDEMIUS. EPIDEMICAL.

Pandemius, p. 574

<https://archive.org/details/b30451772/page/574/mode/1up>



Quain R, Roberts FT, Amstrong ST. (Eds).

**A Dictionary of Medicine:
Including General Pathology, General Therapeutics, Hygiene,
and the Diseases of Women and Children**

New York: D. Appleton, 1895

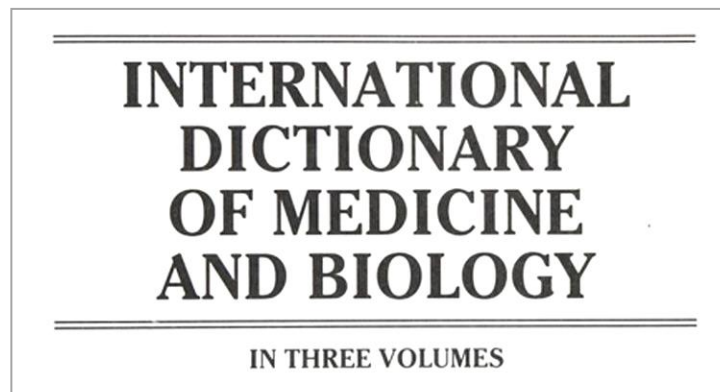
EPIDEMIC (*epidemicus*, affecting the people; from *ἐπί*, upon; and *δῆμος*, a people).

The word 'epidemic' is used in two senses by medical writers and by medical men, namely, (1) in a general sense, and (2) in a technical sense.

As a *general term* the word signifies 'common to, or affecting, a whole people, or a great number in a community; prevalent; general' (*Webster's Dictionary*). It is in this sense that the word is used when it is applied to mental, moral, and social phenomena, as, for example, when we speak or write of 'epidemic suicide,' 'epidemic folly.' This employment of the word is consistent with received literary practice. Thus we read, 'There was a time when wit was epidemic ' (*Athenæum*). Again, M. Littré, writing to the *Temps*: 'It argues great confidence in oneself and one's own enlightenment to treat with haughty disdain, and without reserving any compromise, the opinion of so many citizens, and to regard it as a. case of *epidemic aberration*.'

As a *technical term*, having reference to disease, the word 'epidemic' has several different meanings attached to it. All these meanings include the notion of general prevalence among a community or a people, but some of them would go on, beyond what etymology justifies, to attach a peculiar hypothetical or theoretical conception to the term. Thus (a) Mayne restricts the term to diseases which are contagious, making contagion the essence of epidemicity, as he would phrase it; (b) Dunglison implies by the term a particular constitution of the air ('*constitutio aeris*, or condition of the atmosphere '); (c) other authoritative writers use the term as signifying a widespread cause, telluric, atmospheric, cosmic, as the case may be, acting at the same moment of time on many individuals, or as something occult, regarding which speculation is vain, and which they designate *epidemic constitution or epidemic influence*. ... [Vol. 1, 589]

PANDEMIC DISEASES (*πᾶν*, all; and *δῆμος*, the people). – Epidemic diseases which affect groups of several countries or the world generally. See *Epidemic*. [Vol. 2, 297]



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Landau SI, Becker EL, Butterfield WJH, etc. (Eds).

International dictionary of medicine and biology

New York, Chichester, Brisbane, etc.: A Wiley Medical Publication, 1986

https://archive.org/details/internationaldic0001unse_u0o0/page/963/mode/1up

<https://archive.org/details/internationaldic0003unse/page/2067/mode/1up>

Epidemic [Gk *epidēm(os)* (from *epi* on or among + *dēmos* the people) on or among the people]

1. An unusual increase, not necessarily within a short time, in the number of cases of a transmissible disease previously existing only at an endemic level in a region or population, or the appearance of an unusual number of cases of a disease which was not recognized as being endemic in a region or population.

In modern usage, this term has been extended to apply to any considerable increase in illness whether or not transmissible, or to an increase in other events such as accidents, suicides, etc.

2. Pertaining to or having the character of an epidemic. [Vol. 1, p. 963]

Pandemic [Gk *pandēm(os)* (from *pan*, neut. sing. of *pas* all + *dēmos* the people) pertaining to all the people]

1 An epidemic affecting a very high proportion of the population of a major geographic region. This term is customarily restricted to diseases such as cholera, plague, and influenza.

2. Relating to a pandemic. [Vol. 3, p. 2067].



Chapter 3. The role of the World Health Organization (WHO)

Influenza pandemic preparedness plan:
the role of WHO and guidelines for national and regional planning

Geneva, Switzerland, World Health Organization, April 1999, p. 3-20

WHO/CDS/CSR/EDC/99.1 - <https://apps.who.int/iris/handle/10665/66155>

The Pandemic will be declared when the new virus sub-type has been shown to cause several outbreaks in at least one country, and to have spread to other countries, with consistent disease patterns **indicating that serious morbidity and mortality is likely in at least one segment of the population**. Onset shall be defined as that point in time when WHO has confirmed that a virus with a new haemagglutinin sub-type compared to recent epidemic strains is beginning to spread from one or more initial foci. Depending on the amount of early warning, this phase may or may not have been preceded by the above-described series of increasing levels of preparedness (p. 14).

3.3 Phase 1: Confirmation of onset of pandemic

The Pandemic will be declared when the new virus sub-type has been shown to cause several outbreaks in at least one country, and to have spread to other countries, with consistent disease patterns indicating that serious morbidity and mortality is likely in at least one segment of the population. Onset shall be defined as that point in time when WHO has confirmed that a virus with a new haemagglutinin sub-type compared to recent epidemic strains is beginning to spread from one or more initial foci. Depending on the amount of early warning, this phase may or may not have been preceded by the above-described series of increasing levels of preparedness.

Chapter 3. The role of the World Health Organization (WHO)

Influenza pandemic preparedness plan:

the role of WHO and guidelines for national and regional planning

Geneva, Switzerland, World Health Organization, April 1999, p. 3-20

WHO/CDS/CSR/EDC/99.1 - <https://apps.who.int/iris/handle/10665/66155>

TABLE 1: PREPAREDNESS LEVELS FOR INTER-PANDEMIC, PANDEMIC AND POST-PANDEMIC PERIODS

	PHASE	CHARACTERIZED BY:	EXPLANATION	ACTIONS TO BE TAKEN BY WHO
INTER-PANDEMIC PERIOD	PHASE 0		No indications of any new virus type have been reported	WHO will: co-ordinate a program of international surveillance for influenza in humans, with the assistance of four Collaborating Centres.
	PHASE 0, PREPAREDNESS LEVEL 1	Appearance of a new influenza strain in a human case	This Preparedness Level will exist following the first report(s) of isolation of a novel virus sub-type, without clear evidence of spread of such a virus or of outbreak activity associated with the new virus.	announce , with the help of its task force and after international consultation, this Preparedness Level 1. co-ordinate international efforts to assist national and local authorities reporting the potential pandemic virus in confirming the infection of a human by a novel strain. heighten activities of the laboratory surveillance laboratory network.
	PHASE 0, PREPAREDNESS LEVEL 2	Human infection confirmed	This Preparedness Level will exist when it has been confirmed that two or more human infections have occurred with a new virus sub-type, but where the ability of the virus to readily spread from person-to-person and cause multiple outbreaks of disease leading to epidemics remains questionable.	announce , with the help of its task force and after international consultation, this Preparedness Level 2. encourage and assist the country, where initial cases were detected, to enhance surveillance and diagnosis, and organize special investigations designed to increase understanding of the possible transmission and impact of the new virus. develop a case definition to be used in surveillance for a new virus sub-type. invite a group of countries to participate in determination of the prevalence of antibody to the new virus in the general population. promote enhanced surveillance activity regionally or internationally. promote development and evaluation of candidates for production of vaccines against the novel influenza strain. promote development of reagents necessary to determine the identity and potency of vaccines prepared with the new strain. promote contingency planning for pre-clinical and clinical trials of vaccines. promote the development of strategies for the most efficient use of newly developed vaccines. recommend that national health authorities take contingency steps that will facilitate activation of their National Pandemic Preparedness Plans.

Chapter 3. The role of the World Health Organization (WHO)

Influenza pandemic preparedness plan: the role of WHO and guidelines for national and regional planning

Geneva, Switzerland, World Health Organization, April 1999, p. 3-20

WHO/CDS/CSR/EDC/99.1 - <https://apps.who.int/iris/handle/10665/66155>

TABLE 1: PREPAREDNESS LEVELS FOR INTER-PANDEMIC, PANDEMIC AND POST-PANDEMIC PERIODS, continued

PHASE	CHARACTERIZED BY:	EXPLANATION	ACTIONS TO BE TAKEN BY WHO	
PHASE 0, PREPAREDNESS LEVEL 3	Human transmission confirmed	This Preparedness Level will exist when human transmission of the new virus sub-type has been confirmed through clear evidence of person-to-person spread in the general population, such as secondary cases resulting from contact with an index case, with at least one outbreak lasting over a minimum two week period in one country.	<p>announce, with the help of its task force and after international consultation, Preparedness Level 3.</p> <p>disseminate the case definition to be used in surveillance for the new virus sub-type.</p> <p>facilitate the distribution to all interested manufacturers of candidate vaccine viruses developed as part of the Preparedness Level 2 activities.</p> <p>convene its experts for influenza vaccine composition to develop, disseminate and encourage co-ordinated clinical trials of vaccines against the new strain.</p> <p>convene its experts for vaccine composition to develop ways most likely to make vaccines widely available throughout the world.</p> <p>enhance further its information dissemination to provide timely reports of the status of investigations of the new virus, its spread, and the development of responses to it.</p> <p>contact vaccine manufacturers and national governments about capacity and plans for production and international distribution of a vaccine to the new virus.</p> <p>encourage international co-ordination for purchase and distribution of vaccine among different countries.</p> <p>provide general guidelines to national health authorities based on the best available information to assist individual countries that are determining their course of action.</p>	INTER-PANDEMIC PERIOD
PHASE 1	Confirmation of onset of pandemic	<p>The onset of a new pandemic will be declared when WHO has confirmed that a virus with a new haemagglutinin sub-type compared to recent epidemic strains is beginning to cause several outbreaks in at least one country, and to have spread to other countries, with consistent disease patterns indicating that serious morbidity and mortality is likely in at least one segment of the population.</p>	<p>announce, with the help of its task force and after international consultation, the onset of a new influenza Pandemic: Phase 1.</p> <p>make recommendations for composition and use (doses and schedules) of vaccines, and organize consultations that are intended to facilitate vaccine production and distribution in the most equitable manner possible.</p> <p>issue guidance on the best use of available anti-viral drugs against the new virus.</p> <p>national response measures should be initiated as rapidly as possible according to pre-determined national pandemic plans, updated to take account of specific characteristics of the new sub-type and knowledge of vaccine availability.</p> <p>enhance further its monitoring and reporting of the global spread and impact of the virus.</p> <p>seek support in mobilization of resources for countries with limited capacities through partnership with different organizations and international relief agencies.</p> <p>work with regional offices as appropriate to encourage common activities among nations facing similar challenges from the pandemic.</p>	PANDEMIC PERIOD



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Geneva, Switzerland, World Health Organization, April 1999, p. 3-20

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TABLE 1: PREPAREDNESS LEVELS FOR INTER-PANDEMIC, PANDEMIC AND POST-PANDEMIC PERIODS, continued

	PHASE	CHARACTERIZED BY:	EXPLANATION	ACTIONS TO BE TAKEN BY WHO
PANDEMIC PERIOD	PHASE 2	Regional and multi-regional epidemics	This Preparedness Level will exist when outbreaks and epidemics are occurring in multiple countries, and spreading region by region across the world.	announce , with the help of its task force and after international consultation the onset of the influenza Pandemic: Phase 2. continue to work with regional offices as appropriate to encourage common activities among nations. continue monitoring and reporting of the global spread and impact of the virus. continue to organize the distribution of vaccines in the most equitable manner possible. update guidance on the best use of available anti-viral drugs against the new virus. seek further support in mobilization of resources for countries with limited capacities.
	PHASE 3	End of first pandemic wave	The increase in outbreak activity in the initially affected countries or regions has stopped or reversed, but outbreaks and epidemics of the new virus are still occurring elsewhere.	announce , with the help of its task force and after international consultation, the onset of the influenza Pandemic: Phase 3. continue to work with regional offices as appropriate to encourage common activities among nations. continue monitoring and reporting of the global spread and impact of the virus. continue to organize the distribution of vaccines in the most equitable manner possible. update guidance on the best use of available anti-viral drugs against the new virus. seek further support in mobilization of resources for countries with limited capacities.
	PHASE 4	Second or later waves of the pandemic	Based on past experiences, at least a second severe wave of outbreaks caused by the new virus would be expected to occur within 3-9 months of the initial epidemic in many countries.	announce , with the help of its task force and after international consultation, the onset of the influenza Pandemic: Phase 4. continue monitoring and reporting of the global spread and impact of the virus. estimate the remaining needs for vaccines. estimate the availability of anti-viral drugs. seek further support in mobilization of resources for countries with limited capacities.
POST-PANDEMIC PERIOD	PHASE 5	End of the pandemic (back to Phase 0)	WHO will report when the Pandemic Period has ended, which is likely to be after 2-3 years.	Assessment of the overall impact of the pandemic. Evaluation of "lessons learned" from the pandemic that will assist in responding to future pandemics. Update of the WHO influenza Pandemic Plan.

p. 20

There is a definition of the Pandemic phases, but there is no definition of what 'Pandemic' means



Informal consultation on influenza pandemic preparedness in countries with limited resources

Kuala Lumpur, WHO, 23–25 June 2004, p. 1.
WHO/CDS/CSR/GIP/2004.1

https://web.archive.org/web/20050429013329/http://www.who.int/csr/resources/publications/influenza/CDS_CSR_GIP_2004_1.pdf

Background

An influenza pandemic occurs with the appearance of a new influenza virus against which none of the population has any immunity. This results in several [simultaneous epidemics worldwide with enormous numbers of cases and deaths](#). With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics resulting from a new influenza virus are likely to be established quickly around the world.

A new influenza virus: how it could cause a pandemic

Influenza A and B are two of the three types of influenza viruses associated with annual outbreaks and epidemics of influenza. These epidemics are the result of minor changes in the influenza viruses that enable them to evade the immunity people have developed after either previous infections with the viruses or in response to vaccinations.

Only influenza A virus can cause pandemics. When a major change in either one or both of the influenza A virus surface proteins occurs spontaneously, no one has immunity to this completely new virus. When the virus also has the capacity to spread from person to person, a pandemic can occur.

Background

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Dr. Lee Jong-Wook
Director-General World Health Organization

Foreword
Avian influenza: assessing the pandemic threat

Geneva, WHO, January 2005. WHO/CDS/2005.29
<https://apps.who.int/iris/handle/10665/68985>

Foreword.

Influenza pandemics are associated with **high morbidity, excess mortality, and social and economic disruption**. There were three such pandemics in the twentieth century: in 1918, 1957, and 1968. During 2004, the world moved closer to a further pandemic than it has been at any time since 1968.

In the past, pandemics have announced themselves with a sudden explosion of cases which took the world by surprise. This time, we have been given a clear warning. During 2004, large parts of Asia experienced unprecedented outbreaks of highly pathogenic avian influenza, caused by the H5N1 virus, in poultry. The virus crossed the species barrier to infect humans, with a high rate of mortality.

...

Preparedness for a pandemic presents a dilemma: what priority should be given to an unpredictable but potentially catastrophic event, when many existing and urgent health needs remain unmet? In such a situation, it is useful to put together all the known facts that can help us to see where we stand, what can happen, and what must be done. That is the purpose of this publication. (p. 3)





Д-р Lee Jong-Wook
Генеральный директор ВОЗ

Предисловие
Птичий Грипп: оценка угрозы пандемии

Женева, ВОЗ, январь 2005. WHO/CDS/2005.29
<https://apps.who.int/iris/handle/10665/68985>

Предисловие

Пандемии гриппа характеризуются **высокой заболеваемостью, значительной смертностью** и социально-экономическими потрясениями. В 20-м веке было три таких пандемии: в 1918, 1967 и 1968 гг. В течение 2004 года мир, как никогда близко, начиная с 1968 г, подошел к порогу следующей пандемии.



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Пандемии гриппа характеризуются **высокой заболеваемостью, значительной смертностью** и социально-экономическими потрясениями. В 20-м веке было три таких пандемии: в 1918, 1967 и 1968 гг. В течение 2004 год мир, как никогда близко, начиная с 1968 г, подошел к порогу следующей пандемии.

В прошлом пандемии «объявляли сами себя» путем неожиданного и стремительного нарастания числа заболеваний, и это было для всех сюрпризом. В настоящее же время мы подвергаемся обоснованному беспокойству. В 2004 г. на значительной территории Азии произошла большая вспышка птичьего гриппа, вызванного чрезвычайно патогенным для человека вирусом H5N1, распространенным среди домашней птицы. Вирус преодолел межвидовой барьер и вызвал тяжелые заболевания у людей с высоким процентом смертельных исходов. Наблюдение за развитием ситуации, инициированное ВОЗ, выявило множество признаков, указывающих на то, что может надвигаться пандемия. Сейчас человечество имеет возможности защитить себя от вируса, обладающего пандемическим потенциалом, до того как она начнется.



Pandemic influenza preparedness planning

Report on a joint WHO/European Commission workshop Luxembourg

Luxembourg, WHO, 2–3 March 2005, p. 1.

<https://web.archive.org/web/20070729102621/http://www.euro.who.int/Document/E86578.pdf>

1. Introduction

Influenza pandemics (worldwide epidemics) have occurred at irregular and unpredictable intervals, and have been associated with substantial morbidity, mortality and economic cost.

The influenza A virus can cause pandemics and these occur as a result of changes in the virus leading to a sub-type to which no one has immunity, that can spread easily among humans and can give rise to serious disease. Appearance of such a subtype may lead to several simultaneous epidemics worldwide resulting in high numbers of cases and deaths and placing an immense burden on healthcare systems.

With increasing globalization and urbanization, epidemics caused by a new influenza virus are likely to spread rapidly around the world. It is not possible to state when an influenza pandemic is likely to occur but the risk is considered real enough to justify preparations being made

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План готовности к пандемии гриппа

Отчет о совместном семинаре ВОЗ и Европейской комиссии

Люксембург, 2-3 марта 2005, с. 1

EUR/05/5058942

<https://apps.who.int/iris/bitstream/handle/10665/107653/E86578R.pdf?sequence=2&isAllowed=y>

1. Введение

В прошлом пандемии (глобальные эпидемии) гриппа развивались нерегулярно с непредсказуемыми интервалами между ними и сопровождались **высокой заболеваемостью и смертностью**, а также значительными экономическими потерями.

Пандемии могут быть вызваны вирусом гриппа типа А; они возникают в результате изменений вируса, которые приводят к появлению подтипов, к которым ни у одного человека нет иммунитета; вирусы этого подтипа могут легко распространяться среди людей и приводить к возникновению серьезных заболеваний.

Появление вирусов нового подтипа может приводить к одновременному развитию в мире нескольких вспышек, что приводит к появлению **огромного числа случаев заболеваний и смертей**; это оказывает выраженное негативное влияние на все системы здравоохранения.

По мере усиления глобализации и урбанизации эпидемии, обусловленные новыми типами вируса гриппа могут очень быстро распространяться по всему земному шару. Совершенно невозможно предсказать, когда может возникнуть очередная пандемия гриппа, однако существующий риск ее развития является достаточно реальным для того, чтобы считать проведенные подготовительные мероприятия оправданными.

1. Введение

В прошлом пандемии (глобальные эпидемии) гриппа развивались нерегулярно с непредсказуемыми интервалами между ними и сопровождались высокой заболеваемостью и смертностью, а также значительными экономическими потерями. Пандемии могут быть вызваны вирусом гриппа типа А; они возникают в результате изменений вируса, которые приводят к появлению подтипов, к которым ни у одного человека нет иммунитета; вирусы этого подтипа могут легко распространяться среди людей и приводить к возникновению серьезных заболеваний. Появление вирусов нового подтипа может приводить к одновременному развитию в мире нескольких вспышек, что приводит к появлению огромного числа случаев заболеваний и смертей; это оказывает выраженное негативное влияние на все системы здравоохранения. По мере усиления глобализации и урбанизации эпидемии, обусловленные новыми типами вируса гриппа могут очень быстро распространяться по всему земному шару. Совершенно невозможно предсказать, когда может возникнуть очередная пандемия гриппа, однако существующий риск ее развития является достаточно реальным для того, чтобы считать проведенные подготовительные мероприятия оправданными.



Pandemic influenza preparedness planning

Report on the second joint WHO/European Commission workshop

Copenhagen, 24–26 October 2005, p. 1.

WHO/EURO:2006-4060-43819-61692; EUR/05/5058942

<https://apps.who.int/iris/handle/10665/350056>

1. Introduction

Influenza pandemics (worldwide epidemics) have occurred at irregular and unpredictable intervals and have been associated with substantial morbidity, mortality and economic cost. The influenza A virus can cause pandemics: these occur as a result of changes in the virus leading to a sub-type to which no one has immunity, which can spread easily among humans and which can give rise to serious disease.

Appearance of such a subtype may lead to several simultaneous epidemics worldwide, resulting in high numbers of cases and deaths and placing an immense burden on health care systems. With increasing globalization and urbanization, epidemics caused by a new influenza virus are likely to spread rapidly around the world.

The previous three pandemics occurred in 1918, 1957 and 1968 and although it is not possible to predict when an influenza pandemic is likely to occur, the risk is considered real enough to justify preparations being made. Preparing for the next influenza pandemic requires multidisciplinary support and collaboration from partners at the local, national, regional and international levels. National preparedness planning is not a quick or simple process and will require time, a multisectoral approach, the involvement of communities and commitment from the highest political levels. The failure to control the H5N1 avian influenza (AI) outbreak in south-east Asia, including incidental human cases, and the introduction of this virus into the European Region have put the Region on alert. As a result, controlling AI outbreaks and preventing the spread of the H5N1 virus to humans have placed avian influenza firmly on the agenda of influenza preparedness planning.

1. Introduction

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План готовности к пандемии гриппа Отчет о втором совместном семинаре ВОЗ и Европейской комиссии

Копенгаген, 24–26 октября 2005, с. 1

EUR/05/5059783

<https://apps.who.int/iris/handle/10665/350057>

1. Введение

Пандемии гриппа (глобальные эпидемии) возникали в прошлом с различными непредсказуемыми интервалами и сопровождались **высокими показателями заболеваемости и смертности**, а также большими экономическими потерями.

Вирусы гриппа типа А могут вызывать развитие пандемий: это происходит в результате изменений вируса, которые приводят к появлению подтипа, к которому ни у кого нет иммунитета; поэтому он может легко распространяться среди людей и вызывать развитие серьезных заболеваний.

Появление такого подтипа вируса может приводить к одновременному возникновению нескольких вспышек в разных регионах земного шара, что сопровождается **большим количеством случаев заболеваний и смертей**, а также ложится огромным бременем на системы здравоохранения. В условиях все усиливающейся глобализации и урбанизации эпидемии, вызванные новыми вирусами гриппа, скорее всего очень быстро получают глобальное распространение на всей планете.

1. Введение

Пандемии гриппа (глобальные эпидемии) возникали в прошлом с различными непредсказуемыми интервалами и сопровождались высокими показателями заболеваемости и смертности, а также большими экономическими потерями. Вирусы гриппа типа А могут вызывать развитие пандемий: это происходит в результате изменений вируса, которые приводят к появлению подтипа, к которому ни у кого нет иммунитета; поэтому он может легко распространяться среди людей и вызывать развитие серьезных заболеваний. Появление такого подтипа вируса может приводить к одновременному возникновению нескольких вспышек в разных регионах земного шара, что сопровождается большим количеством случаев заболеваний и смертей, а также ложится огромным бременем на системы здравоохранения. В условиях все усиливающейся глобализации и урбанизации эпидемии, вызванные новыми вирусами гриппа, скорее всего очень быстро получают глобальное распространение на всей планете. Три предшествующих пандемии имели место в 1918, 1957 и 1968 годах; и хотя невозможно предсказать, когда возникнет новая пандемия гриппа, существующий риск ее



WHO checklist for influenza pandemic preparedness planning

Geneva, WHO, 2005, p. vi
WHO/CDS/CSR/GIP/2005.4

<https://web.archive.org/web/20051124223027/http://www.who.int/csr/resources/publications/influenza/FluCheck6web.pdf>

An influenza pandemic

An influenza pandemic (or global epidemic) occurs when a new influenza virus subtype appears, against which no one is immune. This may result in several simultaneous epidemics worldwide [with high numbers of cases and deaths](#). With the increase in global transport and urbanization, epidemics caused by the new influenza virus are likely to occur rapidly around the world.

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A new influenza virus: how it could cause a pandemic

Annual outbreaks and epidemics of influenza are caused by influenza A and B viruses. They are the result of minor changes in the influenza viruses that enable them to evade the immunity we have developed after previous infections with the viruses, or in response to vaccinations.

Only the influenza A virus can cause pandemics. When a major change in either one or both surface proteins of the influenza A virus occurs, no one will be immune, as this represents a completely new virus. When the virus also has the capacity to spread from person to person, a pandemic may develop.

Global pandemics have been reported for many hundreds of years. The best documented pandemics occurred in 1918 (H1N1, the Spanish flu), 1957 (H2N2, the Asian flu) and 1968 (H3N2, the Hong Kong flu).



Liste de contrôle OMS pour la planification préalable à une pandémie de grippe (Organisation mondiale de la Santé)

OMS, 2005, p. vi-vii
WHO/CDS/CSR/GIP/2005.4

https://web.archive.org/web/20060327095624/http://www.who.int/csr/resources/publications/influenza/FluCheck_F4web.pdf
<https://www.africaefuture.org/files/fesbaci/PlanmondialOMSdePreparationPandemieGrippe.pdf>

Une pandémie de grippe

Une pandémie (ou une épidémie mondiale) de grippe se produit lorsqu'apparaît un nouveau sous-type de virus grippal dont personne n'est à l'abri. Plusieurs épidémies peuvent se déclarer simultanément dans le monde, faisant un grand nombre de cas et de décès. Les épidémies dues au nouveau virus grippal sont d'autant plus susceptibles de se propager rapidement dans le monde que les transports internationaux et l'urbanisation s'intensifient.

...

Une pandémie de grippe

Une pandémie (ou une épidémie mondiale) de grippe se produit lorsqu'apparaît un nouveau sous-type de virus grippal dont personne n'est à l'abri. Plusieurs épidémies peuvent se déclarer simultanément dans le monde, faisant un grand nombre de cas et de décès. Les épidémies dues au nouveau virus grippal sont d'autant plus susceptibles de se propager rapidement dans le monde que les transports internationaux et l'urbanisation s'intensifient.

Un nouveau virus grippal: comment il pourrait provoquer une pandémie Des flambées et des épidémies de grippe sont imputables chaque année aux virus grippaux A et B. Elles résultent des légers changements qui s'opèrent dans les virus grippaux et qui leur permettent de faire fi de l'immunité que nous avons acquise à la suite d'infections antérieures dues à ces virus, ou par la vaccination.

Seul le virus grippal A est capable de provoquer des pandémies. En cas de changement majeur dans l'une des deux, ou les deux, protéines de surface du virus grippal A, personne n'est protégé car on se trouve en présence d'un virus entièrement nouveau. Lorsque le virus peut également se transmettre d'une personne à une autre, une pandémie est possible.

Des pandémies mondiales sont signalées depuis des siècles. Celles pour lesquelles on dispose des informations les plus complètes remontent à 1918 (H1N1, grippe espagnole), 1957 (H2N2, grippe asiatique) et 1968 (H3N2, grippe de Hong Kong).

Conséquences d'une pandémie de grippe

Les pandémies de grippe survenues au XXe siècle sont responsables de millions de décès, de bouleversements sociaux et de pertes économiques considérables dans le monde entier. Les spécialistes de la grippe conviennent de l'éventualité d'une autre pandémie mais ils ne peuvent dire quand elle se produira. (p. vi-vii)



Контрольный вопросник ВОЗ для планирования готовности к пандемии гриппа

Женева, ВОЗ, 2005, с. 42-46

WHO/CDS/CSR/GIP/2005.4

https://apps.who.int/iris/bitstream/handle/10665/68980/CDS_CSR_GIP_2005.4R.pdf?sequence=2&isAllowed=y

В "Контрольном вопроснике ВОЗ" на русском языке
вышеупомянутый абзац отсутствует

Приложение 1

Рекомендации по проведению нефармацевтических мероприятий в области здравоохранения

...

Мероприятия по увеличению социальной дистанции

Популяционные меры по снижению многочисленных контактов взрослых (увольнение в отпуск менее значимых работников, закрытие рабочих мест, отмена массовых мероприятий).^d

...

d) Принимая во внимание, что пандемический вирус вызывает **значительную заболеваемость и смертность** во всех возрастных группах, а также отсутствие вакцины, руководители здравоохранения должны со всей серьезностью подойти к вопросу о введении общенациональных мероприятий для сокращения количества заболеваний и смертей. ...

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Asheena Kualakdina, Jai P. Narain

Avian Influenza: Responding to the Pandemic Threat

Regional Health Forum, WHO South-East Asia Region, New Delhi, 2005, 9(2): 9

https://apps.who.int/iris/handle/10665/205801?search-result=true&query=Regional+health+forum&scope=&rpp=10&sort_by=score&order=desc&page=2

Introduction

The emergence of avian influenza caused by the highly pathogenic H5N1 Influenza A virus is a cause for grave concern since this virus has the potential to trigger a pandemic.

Since December 2003, when the current outbreak was first detected in the Republic of Korea, avian influenza has been expanding geographically causing disease in both poultry and humans in an unprecedented number of countries. So far, the virus is not easily transmitted from poultry to humans nor from human-to-human. Nevertheless, the continuous occurrence of H5N1 infection in birds and humans is raising concerns about the emergence of a new virus with a potential to spread rapidly among humans causing a pandemic like the ones which occurred in the past.

The influenza A virus is considered highly unstable. Every year it undergoes minor changes known as antigenic “drift” which result in evolution of a strain slightly different from the previous year. However, a major antigenic change occurs, either through mutation of the same virus or through reassortment or mixing of influenza viruses

This reassortment process, known as antigenic “shift”, can create completely new subtypes of influenza viruses to which populations have no immunity. The lack of immunity coupled with a virus that can replicate in humans and that is able to transmit efficiently among humans can lead to a pandemic. Spreading at great speed the pandemic may cause high morbidity, excess mortality, social disruption and even economic collapse.

Avian Influenza: Responding to the Pandemic Threat

Asheena Kualakdina and Jai P. Narain*

Introduction

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belonging to humans and animals. This reassortment process, known as antigenic “shift”, can create completely new subtypes of influenza viruses to which populations have no immunity. The lack of immunity coupled with a virus that can replicate in humans and that is able to transmit efficiently among humans can lead to a pandemic. Spreading at great speed the pandemic may cause high morbidity, excess mortality, social disruption and even economic collapse.



WHO global influenza preparedness plan: the role of WHO and recommendations for national measures before and during pandemics

Geneva, Switzerland, World Health Organization, 2005, p. 2

WHO/CDS/CSR/GIP/2005.5

<https://apps.who.int/iris/handle/10665/68998>

NEW PHASES	OVERARCHING PUBLIC HEALTH GOALS
Interpandemic period Phase 1. No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk ^a of human infection or disease is considered to be low. Phase 2. No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk ^a of human disease.	Strengthen influenza pandemic preparedness at the global, regional, national and subnational levels. Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.
Pandemic alert period Phase 3. Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact. ^b Phase 4. Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans. ^b Phase 5. Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases. Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development. Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.
Pandemic period Phase 6. Pandemic: increased and sustained transmission in general population. ^b	Minimize the impact of the pandemic.

^a The distinction between **phase 1** and **phase 2** is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction is based on various factors and their relative importance according to current scientific knowledge. Factors may include pathogenicity in animals and humans, occurrence in domesticated animals and livestock or only in wildlife, whether the virus is enzootic or epizootic, geographically localized or widespread, and/or other scientific parameters.

^b The distinction between **phase 3**, **phase 4** and **phase 5** is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include rate of transmission, geographical location and spread, severity of illness, presence of genes from human strains (if derived from an animal strain), and/or other scientific parameters.

There is a definition of the Pandemic phases, but there is no definition of what 'Pandemic' means

Comparison of phases published by WHO in 1999 and those in the present document

WHO global influenza preparedness plan: the role of WHO
and recommendations for national measures before and during pandemics

Geneva, Switzerland, World Health Organization, 2005, p. 7

WHO/CDS/CSR/GIP/2005.5

<https://apps.who.int/iris/handle/10665/68998>

Table 1 **Comparison of phases published by WHO in 1999 and those in the present document**

PHASES AS PUBLISHED BY WHO IN 1999	NEW PANDEMIC PHASES	ADDITIONAL NATIONAL SUBDIVISIONS OF NEW PHASES
Interpandemic period Phase 0	Interpandemic period Phase 1. No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk ^a of human infection or disease is considered to be low. Phase 2. No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk ^a of human disease.	
		Affected or extensive travel/trade links with affected country.
		Not affected.
Phase 0. Preparedness level 1: human case.	Pandemic alert period Phase 3. Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	Affected or extensive travel/trade links with affected country.
		Not affected.
Phase 0. Preparedness level 2: limited human transmission.	Phase 4. Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans. ^b	Affected or extensive travel/trade links with affected country.
		Not affected.
Phase 0. Preparedness level 3: spread in general population.	Phase 5. Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk). ^b	Affected or extensive travel/trade links with affected country.
		Not affected.
Pandemic period Phase 1. Multiple countries.	Pandemic period Phase 6. Pandemic phase: increased and sustained transmission in general population. ^b	Not yet affected.
Phase 2. Multiple regions.		Affected or extensive travel/trade links with affected country.
Phase 3. Subsiding in initially affected countries but not in other countries.		Subsided.
Phase 4. Next wave.		Next wave.
Postpandemic period Phase 5. Return to phase 0.	Postpandemic period Return to interpandemic period.	Return to interpandemic period.

^a The distinction between *phase 1* and *phase 2* is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction would be based on various factors and their relative importance according to current scientific knowledge. Factors may include: pathogenicity in animals and humans; occurrence in domesticated animals and livestock or only in wildlife; whether the virus is enzootic or epizootic, geographically localized or widespread; other information from the viral genome; and/or other scientific information.

^b The distinction between *phase 3*, *phase 4* and *phase 5* is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include: rate of transmission; geographical location and spread; severity of illness; presence of genes from human strains (if derived from an animal strain); other information from the viral genome; and/or other scientific information.



ANNEX 1

Recommendations for nonpharmaceutical public health interventions

WHO global influenza preparedness plan: the role of WHO
and recommendations for national measures before and during pandemics

Geneva, Switzerland, World Health Organization, 2005, p. 46

WHO/CDS/CSR/GIP/2005.5

<https://apps.who.int/iris/handle/10665/68998>

Given a pandemic strain causing **significant morbidity and mortality** in all age groups and the absence of a vaccine, authorities should seriously consider introducing population-wide measures **to reduce the number of cases and deaths**. Decisions can be guided by mathematical and economic modelling. If modelling indicates a reduction in the absolute numbers of cases and deaths, decisions to introduce measures involving multiple government sectors will then need to balance the protection of priority functions against the risk of social and economic disruption.

^a Y = yes, should be done at this phase; N = no, not necessary at this phase; C = should be considered; NR = not relevant.

^b Quality and type of mask depend on risk group. Cases: surgical mask; health-care workers: N95 or equivalent; others: depends on risk.

^c Implementation depends on adequate supplies and may require a global stockpile with a prenegotiated targeting and delivery strategy to ensure availability in the area where a potential pandemic virus emerges. Prophylactic use will depend on evidence of effectiveness. Targeted use is required because of potential for drug resistance, side-effects and limited supplies. Targeted use might consider: public prevention; protection of health-care workers; protection of other essential service providers; individual treatment.

^d Given a pandemic strain causing **significant morbidity and mortality** in all age groups and the absence of a vaccine, authorities should seriously consider introducing population-wide measures **to reduce the number of cases and deaths**. Decisions can be guided by mathematical and economic modelling. If modelling indicates a reduction in the absolute numbers of cases and deaths, decisions to introduce measures involving multiple government sectors will then need to balance the protection of priority functions against the risk of social and economic disruption.

^e Could be considered as an emergency measure to avert or delay a pandemic.

=>

There is a definition of the pandemic phases but no definition of what 'Pandemic' means.
Nevertheless, there will be high morbidity and mortality if a pandemic strain emerges.



Regional influenza pandemic preparedness plan (2006-2008)

WHO Regional Office for South-East Asia, New Dehli, 2006, p. 2-3.

<https://apps.who.int/iris/handle/10665/205803>

1. Background and Rationale

If the human-to-human transmission is not contained quickly the modern means of transportation will rapidly seed a pandemic. Experts estimate that the next pandemic may cause more than 1 billion cases and up to 7.4 million deaths. During the current H5N1 outbreaks more than 150 million birds have been destroyed or died and the direct economic costs to affected countries amount to \$ 8-12 billion. A modest pandemic lasting over one year might cause a loss as high as 3% of Asian GDP and 0.5% of world GDP. This is presently equivalent to about \$ 150-200 billion in GDP.

Therefore, in addition to [high morbidity and mortality](#), the next pandemic may cause massive social, political and economic disruption. (p. 2)

...

It is obvious that the countries with pandemic preparedness plans and pre-existing core capacities would respond promptly and limit the adverse impact of a pandemic. Effective preparedness would ensure that all the needed resources, expertise and services are mobilized and deployed rapidly to [reduce the morbidity, mortality](#) and social disruption to the minimum. Establishment/strengthening of core capacities to preempt and control the next pandemic would also be useful in dealing with other epidemic and public health emergencies. The countries need to accelerate strengthening their response mechanisms and to fill-up the existing gaps. (p. 3)

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Pandemic influenza preparedness and mitigation in refugee and displaced populations

Geneva, WHO, 2008
WHO/HSE/EPR/DCE/2008.3

https://web.archive.org/web/20081112132223/http://www.who.int/diseasecontrol_emergencies/HSE_EPR_DCE_2008_3rweb.pdf

1. Rationale

An influenza pandemic occurs when a novel influenza virus appears against which the human population has limited or no immunity, and which transmits efficiently from person to person, resulting in several simultaneous epidemics worldwide with the potential for **considerable morbidity and mortality**. With the increase in global transport and communications, as well as in urbanization and overcrowded conditions, epidemics caused by the new influenza virus are likely to quickly take hold around the world. The impact of a novel pandemic influenza virus on refugee and displaced populations is expected to be severe. Risk factors for increased morbidity and mortality from pandemic influenza in these populations include:

- overcrowding, particularly in camp settings;
- poor access to basic health-care services that will be accentuated by a pandemic;
- limited or no access to hospitals for supportive care and treatment of complications;
- high prevalence of malnutrition;
- high incidence/prevalence of other communicable diseases, e.g. acute respiratory illnesses, malaria, diarrhoeal diseases;
- logistic challenges resulting from often remote locations or ongoing active conflict;
- lack of adequate surveillance/early warning systems to detect cases or clusters;
- poor links to national disease surveillance systems;
- possible exclusion from national influenza preparedness and response activities;
- lack of trained and equipped staff to investigate outbreaks and manage ill persons.

1. RATIONALE

An influenza pandemic occurs when a novel influenza virus appears against which the human population has limited or no immunity, and which transmits efficiently from person to person, resulting in several simultaneous epidemics worldwide with the potential for considerable morbidity and mortality. With the increase in global transport and communications, as well as in urbanization and overcrowded conditions, epidemics caused by the new influenza virus are likely to quickly take hold around the world. The impact of a novel pandemic influenza virus on refugee and displaced populations is expected to be severe. Risk factors for increased morbidity and mortality from pandemic influenza in these populations include:



Pandemic influenza preparedness and response: a WHO guidance document

Geneva, Switzerland, World Health Organization, April 2009

<https://www.who.int/publications/i/item/9789241547680>

<https://web.archive.org/web/20090509051754/http://www.who.int/csr/disease/influenza/PIPGuidance09.pdf>

<https://www.ncbi.nlm.nih.gov/books/NBK143062/>

Executive Summary

Influenza pandemics are unpredictable but recurring events that **can have severe consequences on human health and economic well being worldwide**. Advance planning and preparedness are critical to help mitigate the impact of a global pandemic. This WHO guidance document Pandemic influenza preparedness and response significantly updates and replaces WHO global influenza preparedness plan: The role of WHO and recommendations for national measures before and during pandemics which was published in 2005. (p. 8)

...

Overview of the major changes

The revised Guidance:

1. Retains the six-phase structure but regroups and redefines the phases to more accurately reflect pandemic risk and the epidemiological situation based upon observable phenomena. (8)

...

The WHO pandemic phases

The phases are applicable globally and provide a framework to aid countries in pandemic preparedness and response planning. The use of a six-phased approach has been retained to facilitate incorporation of new recommendations into existing national plans. However, the pandemic phases have been re-defined (Table 1). To facilitate planning at national and global levels, Phases 1-3 and 5-6 have been grouped to include common action points. In addition, the time after the first pandemic wave has been elaborated into post peak and post pandemic periods. When making a change to the global phase, WHO will carefully consider all available information to assess if the criteria for a new phase have been met. (10)

TABLE 1 PANDEMIC PHASE DESCRIPTIONS	
	DESCRIPTION
PHASE 1	No animal influenza virus circulating among animals has been reported to cause infection in humans.
PHASE 2	An animal influenza virus circulating in domesticated or wild animals is known to have caused infection in humans and is therefore considered a specific potential pandemic threat.
PHASE 3	An animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.
PHASE 4	Human-to-human transmission (H2H) of an animal or human-animal influenza reassortant virus able to sustain community-level outbreaks has been verified.
PHASE 5	The same identified virus has caused sustained community level outbreaks in two or more countries in one WHO region.
PHASE 6	In addition to the criteria defined in Phase 5, the same virus has caused sustained community level outbreaks in at least one other country in another WHO region.
POST-PEAK PERIOD	Levels of pandemic influenza in most countries with adequate surveillance have dropped below peak levels.
POSSIBLE NEW WAVE	Level of pandemic influenza activity in most countries with adequate surveillance rising again.
POST-PANDEMIC PERIOD	Levels of influenza activity have returned to the levels seen for seasonal influenza in most countries with adequate surveillance.

2. Background

Influenza pandemics are unpredictable but recurring events that [can have severe consequences on societies worldwide](#). Since the 16th century, influenza pandemics have been described at intervals ranging between 10 and 50 years⁴ with varying severity and impact. (13)

...

The precise timing and impact of a [future influenza pandemic remains unknown](#). Developing and sustaining a country's preparedness is challenging, and carries a risk of complacency. (13)

...

While the H5N1 virus is currently the most visible influenza virus with pandemic potential, it is not the only candidate. (14)

...

3.2.2 The designation of the global pandemic phase

The designation of the global pandemic phase [will be made by the Director-General of WHO](#). The designation of a phase will be made consistent with applicable provisions of the IHR (2005) and in consultation with other organizations, institutions, and affected Member States.

...

3.2.5. Providing an early assessment of pandemic severity on health

As soon as possible, WHO will provide an assessment of pandemic severity to help governments determine the level of interventions required as part of their response. As outlined in section 1.1, [past influenza pandemics have been associated with varying levels of illness and death](#). (22)

...

[Pandemic severity](#) may be assessed [in many ways](#). One fundamental distinction is an assessment based on direct health effects as opposed to one based upon societal and economic effects. While societal and economic effects may be highly variable from country to country and dependent upon multiple factors (including the effects of the media and the underlying state of preparedness), WHO plans to assess pandemic severity based [primarily on observable effects on health](#). (22)

...

4. The Who Pandemic Phases

The WHO pandemic phases were developed in 1999 and revised in 2005.

The phases are applicable to the entire world and provide a global framework to aid countries in pandemic preparedness and response planning. In this revision, WHO has retained the use of a six-phased approach for easy incorporation of new recommendations and approaches into existing national preparedness and response plans. The grouping and description of pandemic phases have [been revised to make them easier to understand, more precise](#), and based upon observable phenomena. Phases 1-3 correlate with preparedness, including capacity development and response planning activities, while Phases 4-6 clearly signal the need for response and mitigation efforts. Furthermore, periods after the first pandemic wave are elaborated to facilitate post pandemic recovery activities. (24)

...

5. Recommended Actions Before, During and After a Pandemic

...

The use of pharmaceutical interventions to prevent or treat influenza encompasses a range of approaches. Additionally, the successful prevention and treatment of secondary or pre-existing conditions will be a key factor in many settings for [reducing the overall burden of illness and death](#). (28)

WHO Pandemic Phase Descriptions and Main Actions by Phase (p. 27)

TABLE 3 WHO PANDEMIC PHASE DESCRIPTIONS AND MAIN ACTIONS BY PHASE				
	ESTIMATED PROBABILITY OF PANDEMIC	DESCRIPTION	MAIN ACTIONS IN AFFECTED COUNTRIES	MAIN ACTIONS IN NOT-YET-AFFECTED COUNTRIES
PHASE 1	Uncertain	No animal influenza virus circulating among animals has been reported to cause infection in humans.	Producing, implementing, exercising, and harmonizing national pandemic influenza preparedness and response plans with national emergency preparedness and response plans.	
PHASE 2		An animal influenza virus circulating in domesticated or wild animals is known to have caused infection in humans and is therefore considered a specific potential pandemic threat.		
PHASE 3		An animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.		
PHASE 4	Medium to high	Human-to-human transmission of an animal or human-animal influenza reassortant virus able to sustain community-level outbreaks has been verified.	Rapid containment.	Readiness for pandemic response.
PHASE 5	High to certain	The same identified virus has caused sustained community-level outbreaks in at least two countries in one WHO region.	Pandemic response: each country to implement actions as called for in their national plans.	Readiness for imminent response.
PHASE 6	Pandemic in progress	In addition to the criteria defined in Phase 5, the same virus has caused sustained community-level outbreaks in at least one other country in another WHO region.		
POST-PEAK PERIOD		Levels of pandemic influenza in most countries with adequate surveillance have dropped below peak levels.	Evaluation of response; recovery; preparation for possible second wave.	-
POSSIBLE NEW WAVE		Level of pandemic influenza activity in most countries with adequate surveillance is rising again.	Response	
POST-PANDEMIC PERIOD		Levels of influenza have returned to the levels seen for seasonal influenza in most countries with adequate surveillance.	Evaluation of response; revision of plans; recovery.	

There is a definition of the Pandemic phases, but there is no definition of what 'Pandemic' means

Guidelines on regulatory preparedness for provision of marketing authorization of human pandemic influenza vaccines in non-vaccine-producing countries

Annex 7, TRS No 1004. – Geneva, WHO, 31 January 2017. p. 460

<https://www.who.int/publications/m/item/trs1004-annex7-pandemic-influenza-vaccine>

WHO Expert Committee on Biological Standardization Sixty-seventh report

1. Introduction

An influenza pandemic occurs when a novel influenza A virus emerges against which most people do not have immunity, and spreads rapidly around the world. A pandemic influenza A virus is significantly different from normally circulating human influenza A viruses, with a widespread absence of immunity against the virus observed in the population. As with seasonal influenza viruses, pandemic influenza viruses have the ability to spread easily from human to human and cause disease. This may result in several simultaneous epidemics worldwide with high numbers of cases of clinical disease and deaths, leading to considerable social disruption. Pandemic influenza viruses may evolve from subtypes that previously only circulated in animals or from subtypes currently circulating in humans but sufficiently different antigenically for pre-existing immunity in the population to be low or minimal (an example of the latter case is the 2009 H1N1 influenza pandemic). Influenza viruses that have caused past pandemics have typically originated from animals. Owing to the urgent public health need, strategies to shorten the time between the emergence of a human pandemic influenza virus and the availability of safe and effective pandemic influenza vaccines are one of the highest priorities in global health security.

The WHO
influenza vaccine
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The Guide
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1. Introduction

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preparedness as one of the factors that delayed or prevented the deployment of pandemic influenza vaccine in non-vaccine-producing countries. This was especially the case for vaccine destined for donation or deployed by United Nations agencies in response to the pandemic emergency (2–4).

The present Guidelines were developed in response to requests from non-vaccine-producing countries for guidance on the identification of

Part 2

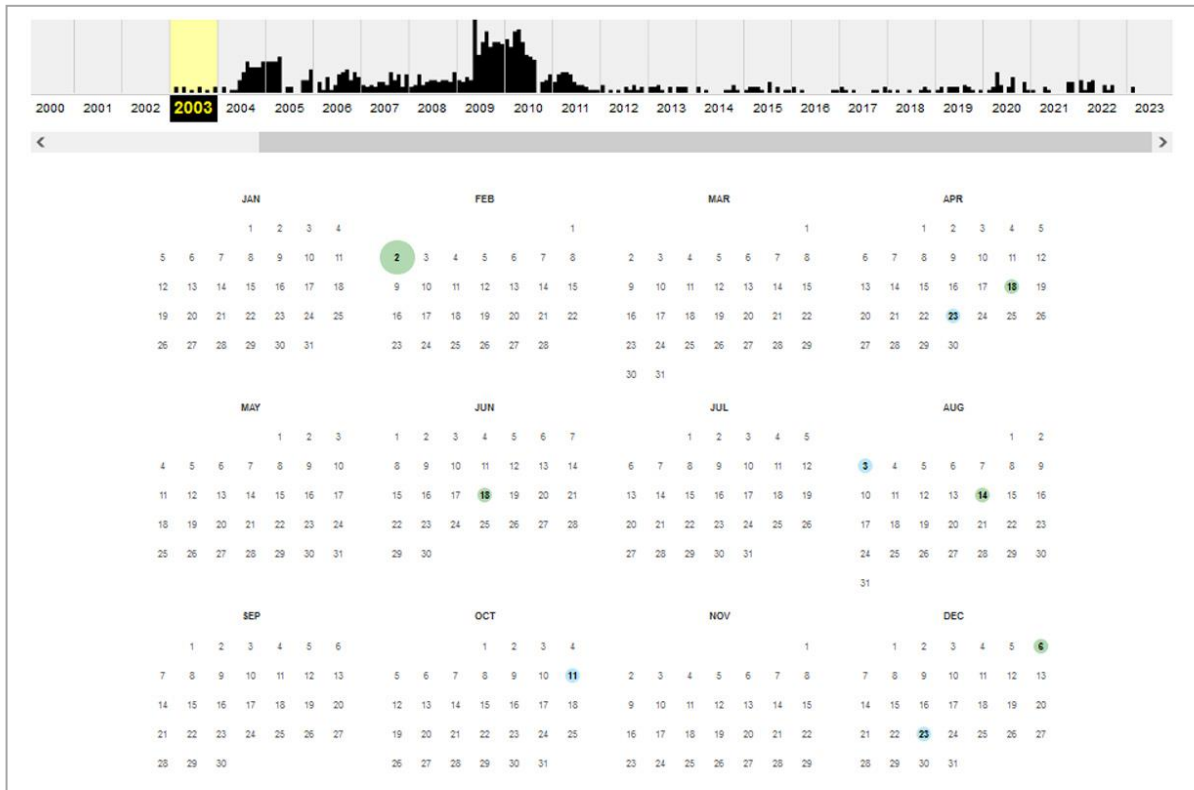
DEFINITION OF PANDEMIC ON THE WHO WEBSITE (2003 – 2011)



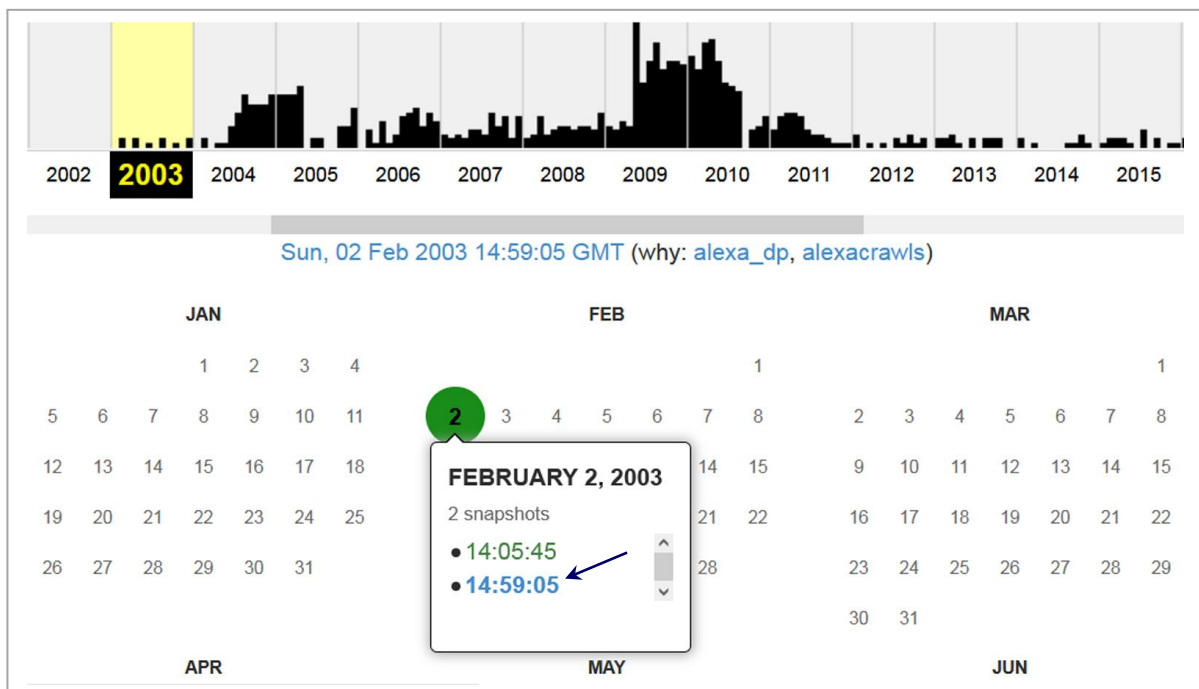
World Health Organization

WHO influenza pandemic websites

Communicable Disease Surveillance & Response (CSR)



https://web.archive.org/web/20030701000000*/http://www.who.int/csr/disease/influenza/pandemic/en/



https://web.archive.org/web/20030701000000*/http://www.who.int/csr/disease/influenza/pandemic/en/

Communicable Disease Surveillance & Response (CSR)

Pandemic preparedness, Geneva, WHO, 2 February 2003; 14:05:45

<https://web.archive.org/web/20030202145905/http://www.who.int/csr/disease/influenza/pandemic/en/>

The screenshot shows the WHO CSR website interface. At the top, there's a header with the WHO logo and the text 'World Health Organization'. Below this, a navigation bar includes links for 'Home', 'Countries', 'Health Topics', 'Publications', 'Research Tools', 'WHO Sites', 'CSR home', 'Alert & Response Operations', 'Diseases', 'Drug Resistance', 'Global Outbreak Alert & Response Network', 'International Health Regulations', 'Laboratory & Epidemiology Strengthening', 'Preparedness for Deliberate Epidemics', and 'Public Health Mapping'. The main content area is titled 'Pandemic preparedness' and contains several sections: 'About CSR', 'Country Activities', 'Outbreak News', 'Resources', 'Media Centre', 'Location: WHO > WHO Sites > CSR home > Diseases > Influenza', 'printable version', 'WHO Influenza Pandemic Preparedness plan', 'National Influenza Pandemic Plans', 'An influenza pandemic', 'A new influenza virus: how it could cause a pandemic', 'Consequences of an influenza pandemic', and 'Detecting a new pandemic virus'. The 'An influenza pandemic' section explains that a pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness. The 'A new influenza virus: how it could cause a pandemic' section states that Influenza A and influenza B are 2 of the 3 types of influenza viruses associated with annual outbreaks and epidemics of influenza. The third type, influenza C, causes only mild disease and has not been associated with widespread epidemics or pandemics. Annual outbreaks of influenza are due to minor changes in the surface proteins of the viruses that enable the viruses to evade the immunity humans have developed after previous infections with the viruses or in response to vaccinations. The 'Consequences of an influenza pandemic' section notes that only influenza A virus can cause pandemics. When a major change in either 1 or both of their surface proteins occurs spontaneously, no one will have partial or full immunity against infection because it is a completely new virus. If this new virus also has the capacity to spread from person-to-person, then a pandemic is most likely to occur.

An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide **with enormous numbers of deaths and illness**. With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

A new influenza virus: how it could cause a pandemic

Influenza A and influenza B are 2 of the 3 types of influenza viruses associated with annual outbreaks and epidemics of influenza. The third type, influenza C, causes only mild disease and has not been associated with widespread epidemics or pandemics. Annual outbreaks of influenza are due to minor changes in the surface proteins of the viruses that enable the viruses to evade the immunity humans have developed after previous infections with the viruses or in response to vaccinations.

Only influenza A virus can cause pandemics. When a major change in either 1 or both of their surface proteins occurs spontaneously, no one will have partial or full immunity against infection because it is a completely new virus. If this new virus also has the capacity to spread from person-to-person, then a pandemic is most likely to occur.

Consequences of an influenza pandemic

During the last century, 3 influenza pandemics **caused millions of death worldwide**, social disruption and profound economic losses. Influenza experts agree that another pandemic is likely to happen . . .

Communicable Disease Surveillance & Response (CSR)

Pandemic preparedness, Geneva, WHO, 26 June 2004; 09:21:24

<https://web.archive.org/web/20040626092138/http://www.who.int/csr/disease/influenza/pandemic/en/>

The screenshot shows the WHO CSR website interface. At the top, there's a header with the WHO logo, the text 'World Health Organization', and language options (English, Español, Français). Below this is a search bar. A left sidebar contains a navigation menu with links like Home, Countries, Health topics, Publications, Research tools, WHO sites, CSR Home, Alert & Response Operations, Diseases, Global Outbreak Alert & Response Network, International Health Regulations, Laboratory & Epidemiology Strengthening, Preparedness for Deliberate Epidemics, and Public Health Mapping. The main content area is titled 'Pandemic preparedness' and includes a breadcrumb trail: 'Location: WHO > WHO sites > CSR Home > Diseases > Influenza'. It features a list of links: 'WHO Guidelines on the Use of Vaccines and Antivirals during Influenza Pandemics', 'WHO consultation on priority public health interventions before and during an influenza pandemic', 'WHO Influenza Pandemic Preparedness plan', and 'National Influenza Pandemic Plans'. Below these are bullet points for 'An influenza pandemic', 'A new influenza virus: how it could cause a pandemic', 'Consequences of an influenza pandemic', 'Detecting a new pandemic virus', and 'Preparing for an influenza pandemic'. The page also contains sections for 'An influenza pandemic' (describing simultaneous epidemics worldwide), 'A new influenza virus: how it could cause a pandemic' (describing minor changes in surface proteins), and 'Consequences of an influenza pandemic' (describing outbreaks in animals). On the right side, there are links to 'WHO consultation on priority public health interventions before and during an influenza pandemic', 'An Interim biosafety risk assessment document', and 'Production of pilot lots of inactivated'.

An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide **with enormous numbers of deaths and illness**. With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

A new influenza virus: how it could cause a pandemic

Annual outbreaks of influenza are due to minor changes in the surface proteins of the viruses that enable the viruses to evade the immunity humans have developed after previous infections with the viruses or in response to vaccinations. When a major change in either one or both of their surface proteins occurs spontaneously, no one will have partial or full immunity against infection because it is a completely new virus. If this new virus also has the capacity to spread from person-to-person, then a pandemic will occur.

Outbreaks of influenza in animals, especially when happening simultaneously with annual outbreaks in humans, increase the chances of a pandemic, through the merging of animal and human influenza viruses. During the last few years, the world has faced several threats with pandemic potential, making the occurrence of the next pandemic just a matter of time.

Consequences of an influenza pandemic

In the past, new strains have generated pandemics **causing high death rates** and great social disruption . . .



Ten things you need to know about pandemic influenza

Geneva, WHO, 14 October 2005

<https://web.archive.org/web/20051124014913/www.who.int/csr/disease/influenza/pandemic10things/en/>

1. Pandemic influenza is different from avian influenza

Avian influenza refers to a large group of different influenza viruses that primarily affect birds. On rare occasions, these bird viruses can infect other species, including pigs and humans. The vast majority of avian influenza viruses do not infect humans. An influenza pandemic happens when a new subtype emerges that has not previously circulated in humans.

For this reason, avian H5N1 is a strain with pandemic potential, since it might ultimately adapt into a strain that is contagious among humans. Once this adaptation occurs, it will no longer be a bird virus--it will be a human influenza virus. Influenza pandemics are caused by new influenza viruses that have adapted to humans.

2. Influenza pandemics are recurring events

An influenza pandemic is a rare but recurrent event. Three pandemics occurred in the previous century: "Spanish influenza" in 1918, "Asian influenza" in 1957, and "Hong Kong influenza" in 1968. The 1918 pandemic killed an estimated 40–50 million people worldwide. That pandemic, which was exceptional, is considered one of the deadliest disease events in human history. Subsequent pandemics were much milder, with an estimated 2 million deaths in 1957 and 1 million deaths in 1968.

A pandemic occurs when a new influenza virus emerges and starts spreading as easily as normal influenza – by coughing and sneezing. Because the virus is new, the human immune system will have no pre-existing immunity. This makes it likely that people who contract pandemic influenza will experience more serious disease than that caused by normal influenza.

3. The world may be on the brink of another pandemic

Health experts have been monitoring a new and extremely severe influenza virus – the H5N1 strain – for almost eight years. The H5N1 strain first infected humans in Hong Kong in 1997, causing 18 cases, including six deaths. Since mid-2003, this virus has caused the largest and most severe outbreaks in poultry on record. In December 2003, infections in people exposed to sick birds were identified.

Since then, over 100 human cases have been laboratory confirmed in four Asian countries (Cambodia, Indonesia, Thailand, and Viet Nam), and more than half of these people have died. Most cases have occurred in previously healthy children and young adults. Fortunately, the virus does not jump easily from birds to humans or spread readily and sustainably among humans. Should H5N1 evolve to a form as contagious as normal influenza, a pandemic could begin.

4. All countries will be affected

Once a fully contagious virus emerges, its global spread is considered inevitable. Countries might, through measures such as border closures and travel restrictions, delay arrival of the virus, but cannot stop it. The pandemics of the previous century encircled the globe in 6 to 9 months, even when most international travel was by ship. Given the speed and volume of international air travel today, the virus could spread more rapidly, possibly reaching all continents in less than 3 months.

5. Widespread illness will occur

Because most people will have no immunity to the pandemic virus, infection and illness rates are expected to be higher than during seasonal epidemics of normal influenza. Current projections for the next pandemic estimate that a substantial percentage of the world's population will require some form of medical care. Few countries have the staff, facilities, equipment, and hospital beds needed to cope with large numbers of people who suddenly fall ill.

6. Medical supplies will be inadequate

Supplies of vaccines and antiviral drugs – the two most important medical interventions for reducing illness and deaths during a pandemic – will be inadequate in all countries at the start of a pandemic and for many months thereafter. Inadequate supplies of vaccines are of particular concern, as vaccines are considered the first line of defence for protecting populations. On present trends, many developing countries will have no access to vaccines throughout the duration of a pandemic.

7. Large numbers of deaths will occur

Historically, the number of deaths during a pandemic has varied greatly. Death rates are largely determined by four factors: the number of people who become infected, the virulence of the virus, the underlying characteristics and vulnerability of affected populations, and the effectiveness of preventive measures. Accurate predictions of mortality cannot be made before the pandemic virus emerges and begins to spread. All estimates of the number of deaths are purely speculative.

WHO has used a relatively conservative estimate – [from 2 million to 7.4 million deaths](#) – because it provides a useful and plausible planning target. This estimate is based on the comparatively mild 1957 pandemic. Estimates based on a more virulent virus, closer to the one seen in 1918, have been made and are much higher. However, the 1918 pandemic was considered exceptional.

8. Economic and social disruption will be great

High rates of illness and worker absenteeism are expected, and these will contribute to social and economic disruption. Past pandemics have spread globally in two and sometimes three waves. Not all parts of the world or of a single country are expected to be severely affected at the same time. Social and economic disruptions could be temporary, but may be amplified in today's closely interrelated and interdependent systems of trade and commerce. Social disruption may be greatest when rates of absenteeism impair essential services, such as power, transportation, and communications.

9. Every country must be prepared

WHO has issued a series of recommended strategic actions [pdf 113kb] for responding to the influenza pandemic threat. The actions are designed to provide different layers of defence that reflect the complexity of the evolving situation. Recommended actions are different for the present phase of pandemic alert, the emergence of a pandemic virus, and the declaration of a pandemic and its subsequent international spread.

10. WHO will alert the world when the pandemic threat increases

WHO works closely with ministries of health and various public health organizations to support countries' surveillance of circulating influenza strains. A sensitive surveillance system that can detect emerging influenza strains is essential for the rapid detection of a pandemic virus.

Six distinct phases have been defined to facilitate pandemic preparedness planning, with roles defined for governments, industry, and WHO. The present situation is categorized as phase 3: a virus new to humans is causing infections, but does not spread easily from one person to another.

Ten things you need to know about pandemic influenza

Geneva, WHO, 14 October 2005

<https://web.archive.org/web/20051124014913/www.who.int/csr/disease/influenza/pandemic10things/en/>

Ten things you need to know about pandemic influenza

14 October 2005

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Dix choses qu'il faut savoir sur la grippe pandémique

Genève, OMS, 14 Octobre 2005

<https://web.archive.org/web/20070106055414/www.who.int/csr/disease/influenza/pandemic10things/fr/>

1. La grippe pandémique est à distinguer de la grippe aviaire

La grippe aviaire est une maladie provoquée par un important groupe de virus grippaux distincts affectant principalement les oiseaux. Ces virus peuvent très occasionnellement infecter d'autres espèces, notamment le porc et l'homme. Dans leur grande majorité, les virus de la grippe aviaire n'infectent pas l'homme. Une pandémie de grippe humaine survient en cas d'émergence d'un nouveau sous type qui n'a pas circulé auparavant chez l'homme.

Pour cette raison, le virus H5NI de la grippe aviaire est une souche susceptible de donner lieu à une pandémie, car elle pourrait en fin de compte s'adapter à l'homme et devenir contagieuse chez lui. Une fois que cette adaptation aura eu lieu, il ne s'agira plus d'un virus aviaire, mais d'un virus grippal humain. Les pandémies de grippe sont provoquées par de nouveaux virus grippaux qui se sont adaptés à l'homme.

2. Les pandémies de grippe sont des événements récurrents

Une pandémie de grippe est un phénomène rare mais récurrent. On a observé trois pandémies au cours du siècle dernier, la grippe dite espagnole en 1918, la grippe dite asiatique en 1957 et la grippe dite de Hong Kong en 1968. La pandémie de 1918 a fait entre 40 et 50 millions de morts dans le monde selon les estimations. Cette pandémie, tout à fait exceptionnelle, est considérée comme une des plus meurtrières de l'histoire de l'humanité. Le bilan des pandémies qui ont suivi était beaucoup plus léger puisque selon les estimations celle de 1957 a fait 2 millions de morts et celle de 1968 1 million de morts.

Une pandémie survient lors de l'émergence d'un nouveau virus grippal qui commence à se propager aussi facilement que celui de la grippe "normale" (saisonnière), c'est-à-dire par la toux et les éternuements. Comme il s'agit d'un nouveau virus, le système immunitaire de l'homme n'a aucune défense contre lui. La pathologie provoquée par ce virus de la grippe pandémique risque donc d'être plus grave que celle que provoque un virus grippal normal.

7. Le nombre de décès sera considérable

Les précédents historiques montrent que le nombre de décès au cours d'une pandémie est très variable. Les taux de mortalité sont principalement déterminés par quatre facteurs : le nombre de personnes infectées, la virulence du virus, les caractéristiques propres et la vulnérabilité des populations touchées et, enfin, l'efficacité des mesures de prévention. Il est impossible d'établir des prévisions exactes concernant la mortalité avant que le virus de la pandémie n'apparaisse et ne commence à se propager. Toutes les estimations relatives au nombre de décès qui lui seraient imputables sont purement spéculatives.

L'OMS a tablé sur une estimation relativement prudente – de 2 à 7,4 millions de décès – qui constitue une cible utile et plausible pour la planification. Cette estimation est fondée sur la pandémie relativement modérée de 1957. Les estimations fondées sur un virus plus virulent, plus proche de celui de 1918, sont beaucoup plus élevées. Toutefois, la pandémie de 1918 était considérée comme exceptionnelle.

8. Une importante désorganisation socio-économique est à prévoir

Il faut s'attendre à un nombre élevé de cas et, par conséquent, à un fort taux d'absentéisme, ce qui contribuera à une désorganisation socio-économique. Les précédentes pandémies se sont propagées en deux et parfois en trois vagues. On ne s'attend pas à ce que toutes les parties du monde ou d'un même pays soient gravement touchées en même temps. Les perturbations socio-économiques peuvent être temporaires, mais elles peuvent être amplifiées par l'étroite interdépendance à laquelle on assiste aujourd'hui en matière d'échanges commerciaux. Elles risquent d'attendre un pic lorsque l'absentéisme entravera le fonctionnement des services essentiels – eau, gaz, électricité, transports et communications.

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Десять фактов, которые вы должны знать о пандемическом гриппе

Женева, ВОЗ, 14 октября 2005

<https://web.archive.org/web/20070107192045/http://www.who.int/csr/disease/influenza/pandemic10things/ru/index.html>

1. Пандемический грипп отличается от птичьего гриппа

Переносчиком птичьего гриппа является большая группа различных вирусов гриппа, которые поражают главным образом птиц. В редких случаях вирусы птичьего гриппа могут инфицировать другие биологические виды, в том числе свиней и людей. В подавляющем большинстве случаев вирусы птичьего гриппа людей не инфицируют. Пандемический грипп возникает тогда, когда появляется новый подтип гриппа, который раньше у людей не наблюдался.

Вирус птичьего гриппа H5N1 представляет собой один из штаммов гриппа, обладающего пандемическим потенциалом, поскольку в конечном итоге он может адаптироваться и принять форму штамма, заразного для людей. После того как произойдет эта адаптация, он уже будет не вирусом птичьего гриппа, а вирусом гриппа, поражающего людей. Пандемии гриппа вызваны новыми вирусами гриппа, которые адаптировались к организму человека.

2. Пандемия гриппа - явление повторяющееся

Пандемия гриппа - явление редкое, но повторяющееся. В прошлом столетии было три таких пандемии: "испанский грипп" в 1918 г., "азиатский грипп" в 1957 г. и "гонконгский грипп" в 1968 году. В 1918 г. пандемия гриппа унесла, по оценкам, 40-50 миллионов человек во всем мире. Эта пандемия, которая носила исключительный характер, считается одной из самых крупных причин смертельных исходов в истории человечества. Последующие пандемии были гораздо слабее: приблизительно два миллиона смертей в 1957 г. и один миллион в 1968 году.

Пандемия возникает тогда, когда появляется новый вирус гриппа и начинает распространяться с той же легкостью, что и вирус обычного гриппа, - воздушно-капельным путем при кашле и чихании. Поскольку этот вирус новый, иммунная система человека не выработала иммунитет на этапе, предшествующем его появлению. Это может привести к тому, что в случае пандемического гриппа среди людей болезнь будет протекать гораздо тяжелее, чем в случае обычного гриппа.

3. Сегодня мир, возможно, стоит на грани очередной пандемии

Специалисты в области здравоохранения уже почти в течение восьми лет ведут наблюдения за новым и чрезвычайно опасным вирусом гриппа - штаммом H5N1. В 1997 г. штаммом H5N1 было инфицировано в Гонконге 18 человек, из которых шесть умерли. С середины 2000 г. этот вирус послужил причиной крупнейших и серьезнейших вспышек болезни среди домашней птицы, которые когда-либо были известны истории. В декабре 2003 г. были выявлены случаи инфицирования людей, работавших с больными птицами.

С тех пор в результате проведения лабораторных анализов было подтверждено свыше 100 случаев гриппа среди людей в четырех азиатских странах (Вьетнаме, Индонезии, Камбодже и Таиланде), причем более половины этих людей скончались. В большинстве случаев эта болезнь поражала детей и взрослых в молодом возрасте, которые ранее не болели. К счастью, этот вирус не может легко передаваться от птицы к человеку или быстро и устойчиво распространяться среди людей. Если штамм H5N1 станет таким же заразным, как и вирус обычного гриппа, то это может положить начало новой пандемии.

4. Пандемия затронет все страны

После того как появится легко передающийся от человека к человеку вирус, его распространение по всему миру, как считается, будет неизбежным. Страны могут задержать появление вируса на своей территории, приняв такие меры, как перекрытие границ и ввод ограничений на международные поездки, однако остановить его они не смогут. В прошлом веке пандемии распространялись по всей планете за 6-9 месяцев, хотя в то время международные поездки осуществлялись в большинстве случаев морским путем. С учетом сегодняшней скорости и объема международных перевозок воздушным транспортом этот вирус может распространиться гораздо быстрее, проникнув, по всей вероятности, на все континенты менее чем за три месяца.

5. Болезнь приобретет широкомасштабный характер

Поскольку никакого иммунитета против вируса пандемического гриппа у большинства людей не будет, показатели инфицирования и заболевания, как ожидается, будут выше, чем в случае сезонных эпидемий обычного гриппа. Нынешние прогнозы в отношении следующей пандемии дают основание сделать вывод о том, что значительной доле мирового населения потребуются медицинская помощь в той или иной форме. Помочь большому количеству внезапно заболевших людей могут лишь немногие страны, у которых есть необходимые для этого сотрудники, объекты инфраструктуры, оборудование и места в больницах.

6. Запасов товаров медицинского назначения будет недостаточно

На начальном этапе пандемии и в течение многих месяцев спустя все страны будут испытывать нехватку запасов вакцин и противовирусных препаратов - двух важнейших продуктов медицинского назначения, которые могут привести к снижению заболеваемости и смертности в ходе пандемии. Недостаточные запасы вакцин вызывают особую озабоченность, поскольку считается, что именно вакцины выполняют функцию "передовой линии обороны", которая может уберечь население. Исходя из нынешних тенденций, можно утверждать, что в течение всей пандемии у многих развивающихся стран не будет доступа к нужным вакцинам.

7. Пандемия унесет жизнь большого числа людей

Данные за прошедший период свидетельствуют о том, что количество смертельных случаев в ходе той или иной пандемии варьируется в широких пределах. Показатели смертности в значительной мере определяются четырьмя факторами: числом инфицированных людей, вирулентностью вируса, исходными характеристиками и уязвимостью затронутого населения и эффективностью профилактических мер. Точно предсказать уровень смертности до того, как появится и начнет распространяться пандемический вирус, невозможно. Все оценки по поводу количества смертей носят чисто гипотетический характер.

В этом плане ВОЗ использует относительно осторожную оценку - **от 2 до 7,4 миллиона смертей**, - поскольку с точки зрения планирования работы она представляет собой практический и правдоподобный ориентир. В основе этой оценки лежат данные о сравнительно слабой пандемии 1957 года. Были также сделаны оценки в расчете на более вирулентный штамм вируса, близкий к тому, который свирепствовал в 1918 г., и они оказались гораздо выше. Вместе с тем считается, что пандемия 1918 г. носила исключительный характер.

8. Произойдет существенное нарушение социально-экономических связей

Следует ожидать, что уровень заболеваемости и невыхода на работу будет высоким, что будет способствовать нарушению социально-экономических связей. В прошлом пандемии распространялись по всему миру двумя и иногда тремя волнами. Вряд ли можно ожидать,

что все страны мира и все районы каждой отдельной страны будут серьезно затронуты в одно и то же время. Социально-экономические нарушения могут носить временный характер, однако сегодня, в условиях тесной связи и взаимозависимости производственных и коммерческих систем, они могут усилиться. Нарушения социальных связей проявятся особенно сильно в тех случаях, когда в результате невыхода на работу нарушится работа основных секторов, таких как энергоснабжение, транспорт и связь.

9. К пандемии должна подготовиться каждая страна

В порядке реагирования на угрозу пандемического гриппа ВОЗ публикует серию рекомендуемых стратегических мер. Эти меры предусматривают создание различных "эшелонов обороны", которые отражают степень сложности изменяющейся ситуации. На нынешнем этапе предупреждения о пандемии, на этапе появления пандемического вируса и на этапе объявления пандемии и ее последующего распространения в мире рекомендуемые меры будут разными.

10. ВОЗ будет оповещать мировое сообщество по мере увеличения угрозы пандемии

ВОЗ тесно сотрудничает с министерствами здравоохранения и различными государственными медико-санитарными организациями в целях оказания помощи странам в укреплении системы эпиднадзора за циркуляцией штаммов гриппа. Для быстрого обнаружения пандемического вируса нужны быстро реагирующие системы эпиднадзора, которые позволяют выявить новые штаммы вируса гриппа.

Для облегчения работы по обеспечению готовности к пандемии было определено шесть отдельных этапов, на каждом из которых правительствам, промышленности и ВОЗ отводится своя роль. По этой классификации нынешняя ситуация находится на этапе 3: новый вирус является причиной инфекции людей, но не передается с легкостью от одного человека к другому.

1. Пандемический грипп отличается от птичьего гриппа.

Переносчиком птичьего гриппа является большая группа различных вирусов гриппа, которые поражают главным образом птиц. В редких случаях вирусы птичьего гриппа могут инфицировать другие биологические виды, в том числе свиней и людей. В подавляющем большинстве случаев вирусы птичьего гриппа людей не инфицируют. Пандемический грипп возникает тогда, когда появляется новый подтип гриппа, который раньше у людей не наблюдался.

7. Пандемия унесет жизнь большого числа людей.

Данные за прошедший период свидетельствуют о том, что количество смертельных случаев в ходе той или иной пандемии варьируется в широких пределах. Показатели смертности в значительной мере определяются четырьмя факторами: числом инфицированных людей, вирулентностью вируса, исходными характеристиками и уязвимостью затронутого населения и эффективностью профилактических мер. Точно предсказать уровень смертности до того, как появится и начнет распространяться пандемический вирус, невозможно. Все оценки по поводу количества смертей носят чисто гипотетический характер.

Epidemic and Pandemic Alert and Response (EPR)

Pandemic preparedness, Geneva, WHO, 23 October 2005; 01:23:58

<https://web.archive.org/web/20051023012358/http://www.who.int/csr/disease/influenza/pandemic/en/>

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Preparedness for Deliberate Epidemics

Pandemic preparedness

- WHO statement on modelling papers published in Science and Nature 4 August 2005
- WHO global influenza preparedness plan (2005)
- WHO checklist for influenza pandemic preparedness planning
- Strengthening pandemic influenza preparedness and response Report by the Secretariat, World Health Assembly, 2005
- Influenza pandemic preparedness and response, Report by the Secretariat to the WHO Executive Board, January 2005
- Informal consultation on influenza pandemic preparedness in countries with limited resources
- WHO Guidelines on the Use of Vaccines and Antivirals during Influenza Pandemics
- WHO consultation on priority public health interventions before and during an influenza pandemic
- National Influenza Pandemic Plans

An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness. With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

A new influenza virus: how it could cause a pandemic

Annual outbreaks of influenza are due to minor changes in the surface proteins of the viruses that enable the viruses to evade the immunity humans have developed after previous infections with the viruses or in response to vaccinations. When a major change in either one or both of their surface proteins occurs spontaneously, no one will have partial or full immunity against infection because it is a completely new virus. If this new virus also has the capacity to spread from person-to-person, then a pandemic will occur.

Outbreaks of influenza in animals, especially when happening simultaneously with annual outbreaks in humans, increase the chances of a pandemic, through the merging of animal and human influenza viruses. During the last few years, the world has faced several threats with pandemic potential, making the occurrence of the next pandemic just a matter of time.

Consequences of an influenza pandemic

An influenza pandemic

- An influenza pandemic
- A new influenza virus: how it could cause a pandemic
- Consequences of an influenza pandemic
- Detecting a new pandemic virus
- Preparing for an influenza pandemic

Strengthening Pandemic Influenza Preparedness and Response

WHO Technical Briefing at the 58th World Health Assembly
18 May 2005

WHO consultation on priority public health interventions before and during an influenza pandemic

An Interim biosafety risk assessment document

Production of pilot lots of inactivated influenza vaccines from reassortants derived from avian influenza

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Consequences of an influenza pandemic

In the past, new strains have generated pandemics **causing high death rates** and great social disruption . . .

Epidemic and Pandemic Alert and Response (EPR)

Pandemic preparedness, Geneva, WHO, 16 October 2008; 03:36:02

<https://web.archive.org/web/20081016033602/http://www.who.int/csr/disease/influenza/pandemic/en/>

An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide **with enormous numbers of deaths and illness**. With the increase in global transport, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

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Consequences of an influenza pandemic

In the past, influenza pandemics have resulted in **increased morbidity and mortality** and great social disruption . . .

Epidemic and Pandemic Alert and Response (EPR)

Pandemic preparedness, Geneva, WHO, 4 May 2009; 00:56:05

<https://web.archive.org/web/20090504005605/http://www.who.int/csr/disease/influenza/pandemic/en/>

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- [New- Pandemic influenza preparedness and response- A WHO guidance document](#)
- [New- WHO pandemic phase descriptions and main actions by phase \(pdf 456kb\)](#)
- [Considerations on exercises to validate pandemic preparedness plans \(pdf 30kb\)](#)
- [WHO checklist for influenza pandemic preparedness planning](#)
- [Swine influenza](#)

An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide with enormous numbers of deaths and illness. With the increase in global transport, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

Outbreaks of influenza in animals, especially when happening simultaneously with annual outbreaks of seasonal influenza in humans, increase the chances of a pandemic, through the merging of animal and human influenza viruses. During the last few years, the world has faced several threats with pandemic potential, making the occurrence of the next pandemic a matter of time.

Consequences of an influenza pandemic

In the past, influenza pandemics have resulted in increased morbidity and mortality and great social disruption. In the 20th century, the most severe influenza pandemic occurred in 1918 - 1919 and caused an estimated 40-50 million deaths world wide. Current epidemiological models project that a pandemic could result in 2 to 7.4 million deaths globally.

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Consequences of an influenza pandemic

In the past, influenza pandemics have resulted in **increased morbidity and mortality** and great social disruption . . .

Epidemic and Pandemic Alert and Response (EPR)

Pandemic preparedness, Geneva, WHO, 4 May 2009; 20:58:39

<https://web.archive.org/web/20090504205839/http://www.who.int/csr/disease/influenza/pandemic/en/>

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- New- WHO pandemic phase descriptions and main actions by phase [pdf 456kb]
- Considerations on exercises to validate pandemic preparedness plans [pdf 30kb]
- WHO checklist for influenza pandemic preparedness planning
- Influenza A(H1N1)

Introduction

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If an influenza pandemic were to occur today, we could expect:

- the pandemic virus to spread rapidly due to the high level of global traffic;
- vaccines, antiviral agents and antibiotics to treat secondary infections to be in short supply, with a period of several months before any vaccine becomes available;
- medical facilities to be overwhelmed with demands to care for both influenza and non-influenza patients;
- widespread illness to result in sudden and potentially significant shortages of personnel to provide essential community services.

Detecting a new pandemic virus

Continuous global surveillance of influenza is key to the early detection of a virus with pandemic potential. WHO has a network of more than 120 National Influenza Centres in over

Introduction

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Consequences of an influenza pandemic

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Epidemic and Pandemic Alert and Response (EPR)

Pandemic preparedness, Geneva, WHO, 5 May 2009; 01:03:31

<https://web.archive.org/web/20090505010331/http://www.who.int/csr/disease/influenza/pandemic/en/>

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- New- Pandemic influenza preparedness and response- A WHO guidance document
- New- WHO pandemic phase descriptions and main actions by phase [pdf 456kb]
- Considerations on exercises to validate pandemic preparedness plans [pdf 30kb]
- WHO checklist for influenza pandemic preparedness planning
- Influenza A(H1N1)

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Epidemic and Pandemic Alert and Response (EPR)

Pandemic preparedness, Geneva, WHO, 6 May 2009; 00:51:07

<https://web.archive.org/web/20090506005107/http://www.who.int/csr/disease/influenza/pandemic/en/>

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- Pandemic influenza preparedness and response- A WHO guidance document
- WHO pandemic phase descriptions and main actions by phase (pdf 456kb)
- Considerations on exercises to validate pandemic preparedness plans (pdf 30kb)
- WHO checklist for influenza pandemic preparedness planning
- Influenza A(H1N1)

What is an influenza pandemic?

A disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide epidemic of a disease. An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity. With the increase in global transport, as well as urbanization and overcrowded conditions in some areas, epidemics due to a new influenza virus are likely to take hold around the world, and become a pandemic faster than before. WHO has defined the phases of a pandemic to provide a global framework to aid countries in pandemic preparedness and response planning. Pandemics can be either mild or severe in the illness and death they cause, and the severity of a pandemic can change over the course of that pandemic.

Potential consequences

In the past, influenza pandemics have resulted in increased death and disease and great social disruption. In the 20th century, the most severe influenza pandemic occurred in 1918-1919 and caused an estimated 40 to 50 million deaths world wide. Current epidemiological models project that a pandemic could result in two to 7.4 million deaths globally.

If an influenza pandemic were to occur today, we could expect the virus to spread rapidly due to the interconnected nature of the world and the high level of global travel.

If the pandemic evolved to become severe and widespread over time, we could also expect:

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Potential consequences

In the past, influenza pandemics have **resulted in increased death and disease** and great social disruption. In the 20th century, the most severe influenza pandemic occurred in 1918-1919 and caused an estimated 40 to 50 million deaths world wide. Current epidemiological models project that a pandemic could result in two to 7.4 million deaths globally.

If an influenza pandemic were to occur today, we could expect the virus to spread rapidly due to the interconnected nature of the world and the high level of global travel.

Global Alert and Response (GAR)

Pandemic preparedness, Geneva, WHO, 10 July 2009; 23:26:11

<https://web.archive.org/web/20090710232611/http://www.who.int/csr/disease/influenza/pandemic/en/>

The screenshot shows the WHO website's Global Alert and Response (GAR) section. The header includes the WHO logo, navigation links in multiple languages (Arabic, Chinese, English, French, Russian, Spanish), a search bar, and radio buttons for 'All WHO' and 'This site only'. The left sidebar contains a menu with links to Home, About WHO, Countries, Health topics, Publications, Data and statistics, Programmes and projects, GAR Home, Alert & Response Operations, Diseases, Global Outbreak Alert & Response Network, and Biorisk Reduction. The main content area is titled 'Global Alert and Response (GAR)' and 'Pandemic preparedness'. It lists several links: 'Pandemic influenza preparedness and response- A WHO guidance document', 'WHO pandemic phase descriptions and main actions by phase [pdf 456kb]', 'Considerations on exercises to validate pandemic preparedness plans [pdf 30kb]', 'WHO checklist for influenza pandemic preparedness planning', and 'Pandemic (H1N1) 2009'. Below these links, the section 'What is an influenza pandemic?' defines a pandemic as a worldwide epidemic of a disease, noting that an influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity. It mentions that with the increase in global transport, epidemics due to a new influenza virus are likely to take hold around the world and become a pandemic faster than before. WHO has defined the phases of a pandemic to provide a global framework to aid countries in pandemic preparedness and response planning. It states that pandemics can be either mild or severe in the illness and death they cause, and the severity of a pandemic can change over the course of that pandemic. The section 'Potential consequences' describes that in the past, influenza pandemics have resulted in increased death and disease and great social disruption. In the 20th century, the most severe influenza pandemic occurred in 1918-1919 and caused an estimated 40 to 50 million deaths world wide. Current epidemiological models project that a pandemic could result in two to 7.4 million deaths globally. It also states that if an influenza pandemic were to occur today, we could expect the virus to spread rapidly due to the interconnected nature of the world and the high level of global travel. If the pandemic evolved to become severe and widespread over time, we could also expect: vaccines, antiviral agents and antibiotics to treat secondary infections to be in high demand, and potentially in short supply; medical facilities to be strained with demands to care for both influenza and non-influenza patients; and potentially significant shortages of personnel to provide essential community services. Finally, it states that effective pandemic preparedness around the world is essential to mitigate the effects of a pandemic, particularly if it becomes severe.

What is an influenza pandemic?

A disease epidemic occurs when there are more cases of that disease than normal. **A pandemic is a worldwide epidemic of a disease.** An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity. With the increase in global transport, as well as urbanization and overcrowded conditions in some areas, epidemics due to a new influenza virus are likely to take hold around the world, and become a pandemic faster than before. WHO has defined the phases of a pandemic to provide a global framework to aid countries in pandemic preparedness and response planning. Pandemics can be either mild or severe in the illness and death they cause, and the severity of a pandemic can change over the course of that pandemic.

Potential consequences

In the past, influenza pandemics have **resulted in increased death and disease** and great social disruption . . .

Global Alert and Response (GAR)

Pandemic preparedness, Geneva, WHO, 8 July 2011; 09:58:10

<https://web.archive.org/web/20110708095810/http://www.who.int/csr/disease/influenza/pandemic/en/>

The screenshot shows the WHO Global Alert and Response (GAR) website. At the top is the WHO logo and the text 'World Health Organization'. Below this is a navigation bar with links: Home, Health topics, Data and statistics, Media centre, Publications, Countries, and Programmes and projects. A search bar is located below the navigation bar. The main heading is 'Global Alert and Response (GAR)'. On the left is a sidebar with links: GAR Home, Alert & Response Operations, Diseases (highlighted), Global Outbreak Alert & Response Network, and Biorisk Reduction. The main content area is titled 'Pandemic preparedness' and contains several links and documents: 'Whole-of-society pandemic readiness' (pdf, 1.39Mb), 'WHO guidelines for pandemic preparedness and response in the non-health sector (Geneva, July 2009)', 'Proposals to finalize remaining elements of the "Pandemic Influenza Preparedness Framework for sharing influenza viruses and access to vaccines and other benefits"', 'Director-General's consultation with Member States', 'Pandemic influenza preparedness and response- A WHO guidance document', 'WHO pandemic phase descriptions and main actions by phase' (pdf, 341kb), 'Considerations on exercises to validate pandemic preparedness plans' (pdf, 30kb), 'WHO checklist for influenza pandemic preparedness planning', and 'Pandemic (H1N1) 2009'. Below these links is a section titled 'What is an influenza pandemic?' which defines a pandemic as a worldwide epidemic of a disease, specifically an influenza pandemic, and mentions WHO's phases of a pandemic. At the bottom is a section titled 'Potential consequences' which discusses the historical impact of influenza pandemics, including the 1918-1919 pandemic, and mentions current epidemiological models projecting potential future deaths.

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Potential consequences

In the past, influenza pandemics have **resulted in increased death and disease** and great social disruption . . .

Global Alert and Response (GAR)

Pandemic preparedness, Geneva, WHO, 7 Aug 2011; 06:08:18

<https://web.archive.org/web/20110807060818/http://www.who.int/csr/disease/influenza/pandemic/en/>



An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide **with enormous numbers of deaths and illness**. With the increase in global transport, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

Outbreaks of influenza in animals, especially when happening simultaneously with annual outbreaks of seasonal influenza in humans, increase the chances of a pandemic, through the merging of animal and human influenza viruses. During the last few years, the world has faced several threats with pandemic potential, **making the occurrence of the next pandemic a matter of time**.

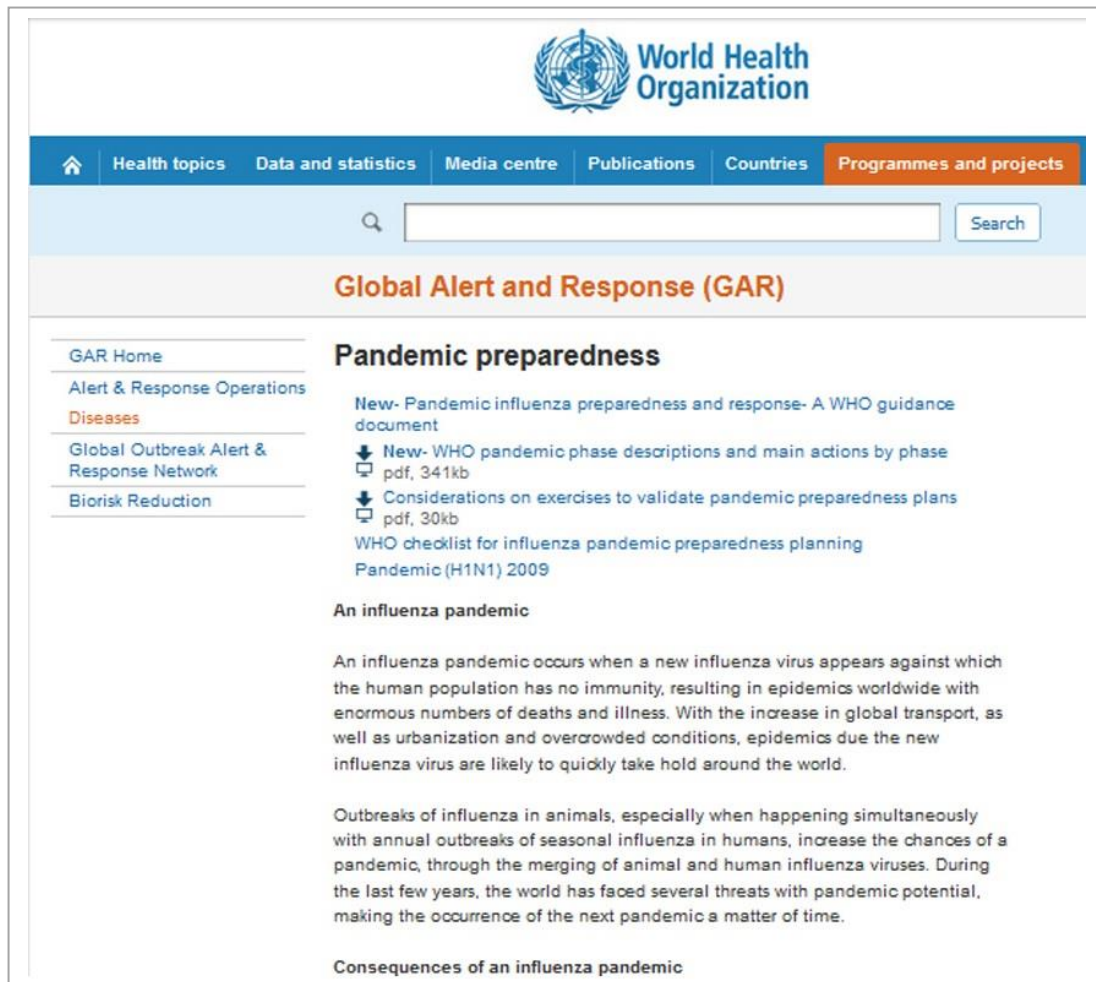
Consequences of an influenza pandemic

In the past, influenza pandemics have **resulted in increased morbidity and mortality** and great social disruption.

Global Alert and Response (GAR)

Pandemic preparedness, Geneva, WHO, 3 September 2011; 07:04:02

<https://web.archive.org/web/20110903070402/http://www.who.int/csr/disease/influenza/pandemic/en/>



An influenza pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide **with enormous numbers of deaths and illness**. With the increase in global transport, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

Outbreaks of influenza in animals, especially when happening simultaneously with annual outbreaks of seasonal influenza in humans, increase the chances of a pandemic, through the merging of animal and human influenza viruses. During the last few years, the world has faced several threats with pandemic potential, **making the occurrence of the next pandemic a matter of time**.


Consequences of an influenza pandemic

In the past, influenza pandemics have **resulted in increased morbidity and mortality** and great social disruption.

Global Alert and Response (GAR)


Geneva, WHO, 7 November 2011; 10:47:53

<https://web.archive.org/web/20111107104753/http://www.who.int/influenza/pandemic/en/>

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Alerta y Respuesta Mundiales (GAR)

Preparación para una pandemia, ategory definitions

Ginebra, OMS, 25 de julio de 2009

<https://web.archive.org/web/20090725102114/http://www.who.int/csr/disease/influenza/pandemic/es/index.html>

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- [Descripción de las fases de alerta de pandemia de la OMS y de las medidas principales en cada fase \[pdf 456kb\]](#)
- [Consideraciones sobre los ejercicios para validar los planes de preparación para una pandemia - en inglés \[pdf 30kb\]](#)
- [Gripe por A\(H1N1\)](#)

¿Qué es una pandemia de gripe?

Se dice que hay una epidemia cuando el número de casos de una enfermedad es superior al normal. Una pandemia es una epidemia a escala mundial. Las pandemias de gripe se producen cuando aparece un nuevo virus de la gripe frente al cual la población humana carece de inmunidad. El aumento del transporte mundial y la urbanización, así como las condiciones de hacinamiento existentes en algunas zonas, aumentan la probabilidad de que las epidemias por nuevos virus de la gripe se mundialicen y conviertan en pandemias más rápidamente que antes. La OMS ha definido una serie de fases de una pandemia que sirven como marco mundial para ayudar a los países en la preparación contra una pandemia y la planificación de la respuesta. Las pandemias pueden ser leves o graves con respecto a la morbilidad y mortalidad que causen, y su gravedad puede cambiar a lo largo de una misma pandemia.

Posibles consecuencias

En el pasado las pandemias de gripe han producido un aumento de la morbilidad y mortalidad, y grandes trastornos sociales. En el siglo XX, la pandemia más grave fue la de 1918-1919, que causó unos 40 a 50 millones de muertos en todo el mundo. Los modelos epidemiológicos actuales prevén

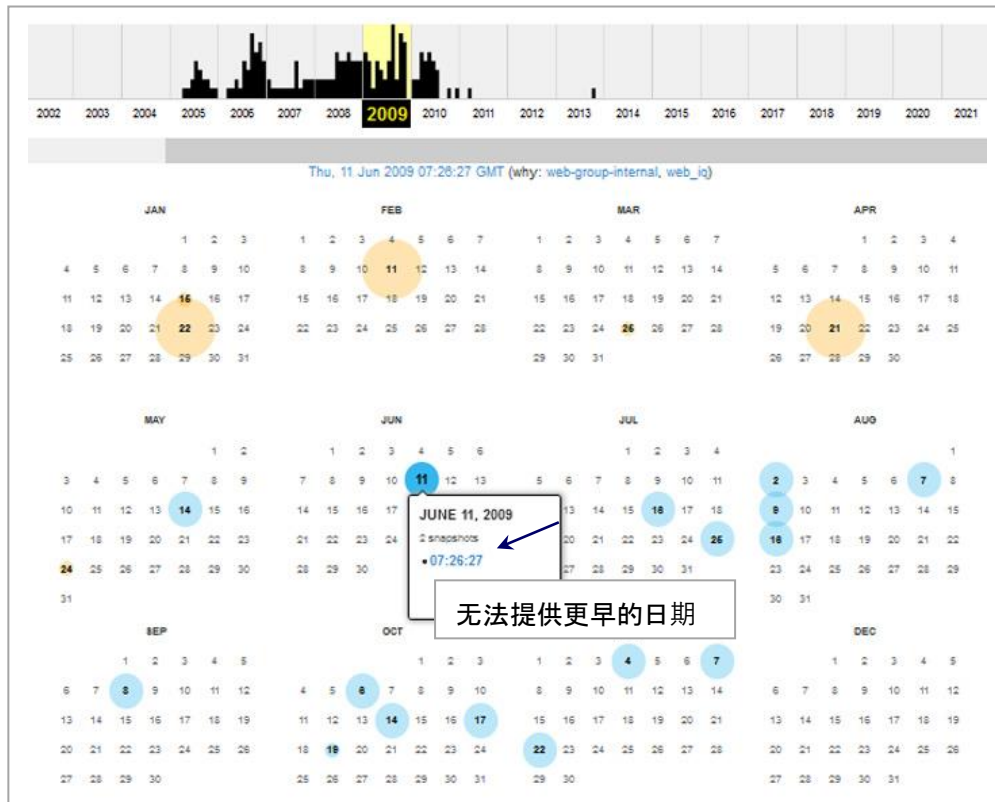
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流行病和大流行病预警和反应 (EPR)



https://web.archive.org/web/20090601000000*/http://www.who.int/csr/disease/influenza/pandemic/zh/index.html
<https://web.archive.org/web/20110312165110/http://www.who.int/csr/disease/influenza/pandemic/zh/index.html>



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<https://web.archive.org/web/20071118112312/http://www.who.int/csr/disease/influenza/pandemic/zh/index.html>

流行病和大流行病预警和反应 (EPR)

防范大流行

世界卫生组织，日内瓦，2009年7月25日

<https://web.archive.org/web/20090611072627/http://www.who.int/csr/disease/influenza/pandemic/zh/index.html>



什么是流感大流行？

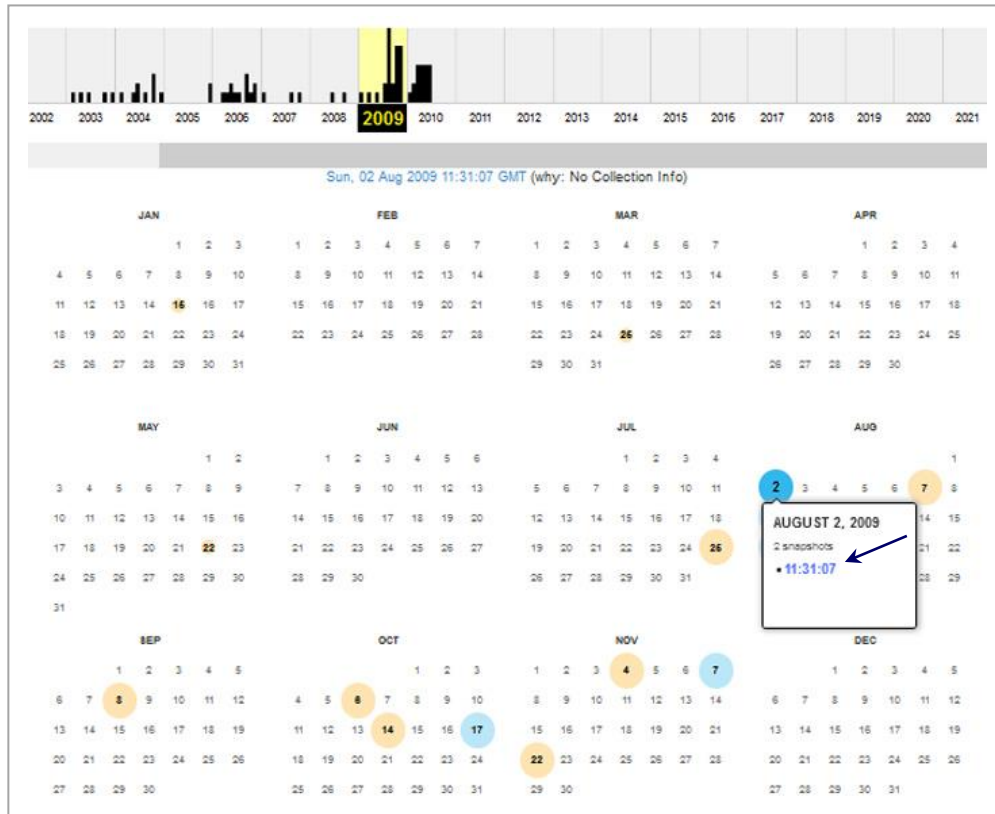
如果某一疾病的病例数超过正常水平，即为疾病流行疫情。大流行指全球范围内流行某一疾病。当一种新流感病毒出现且人类对其不具免疫力时，即可能发生流感大流行。随着全球交通运输更为便利以及一些地区的城市化和过度拥挤问题，新流感病毒导致的流行病可能会在世界各地肆虐，并以空前速度演变成为大流行病。世卫组织确定了大流行警戒级别，为协助各国制定大流行防范和应对计划提供了全球框架。从疾病和死亡人数看，有的大流行影响甚微，有的则造成严重后果。大流行的严重程度可能会在大流行期间有所变化。

可能造成的后果

历史上，**流感大流行导致大量人生病和死亡**，对社会造成严重冲击。1918-1919年流感大流行是20世纪最严重的大流感疫情，估计世界各地约有4千万至5千万人丧生。目前，根据现有流行病学模型预测，大流行可导致全球200万至740万人死亡。

Alerte et réponse aux épidémies et pandémies (EPR)

Il n'y a pas de page disponible pour voir en français

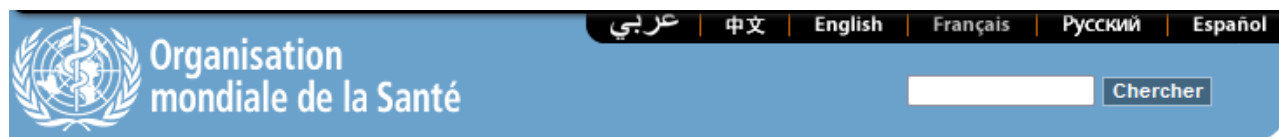


<https://web.archive.org/web/20090701000000/http://www.who.int/csr/disease/influenza/pandemic/fr/index.html>

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<http://www.who.int/csr/disease/influenza/pandemic/fr/index.html>



Alerte et réponse aux épidémies et pandémies (EPR)

(restauré par - restored from)

Liste de contrôle OMS pour la planification préalable à une pandémie de grippe
(Organisation mondiale de la Santé)

OMS, 2005, WHO/CDS/CSR/GIP/2005.4, p. vi-vii

https://web.archive.org/web/20060327095624/http://www.who.int/csr/resources/publications/influenza/FluCheck_F4web.pdf

...

Une pandémie de grippe

Une pandémie (ou une épidémie mondiale) de grippe se produit lorsqu'apparaît un nouveau sous-type de virus grippal dont personne n'est à l'abri. Plusieurs épidémies peuvent se déclarer simultanément dans le monde, **faisant un grand nombre de cas et de décès**. Les épidémies dues au nouveau virus grippal sont d'autant plus susceptibles de se propager rapidement dans le monde que les transports internationaux et l'urbanisation s'intensifient.

Un nouveau virus grippal: comment il pourrait provoquer une pandémie Des flambées et des épidémies de grippe sont imputables chaque année aux virus grippaux A et B. Elles résultent des légers changements qui s'opèrent dans les virus grippaux et qui leur permettent de faire fi de l'immunité que nous avons acquise à la suite d'infections antérieures dues à ces virus, ou par la vaccination.

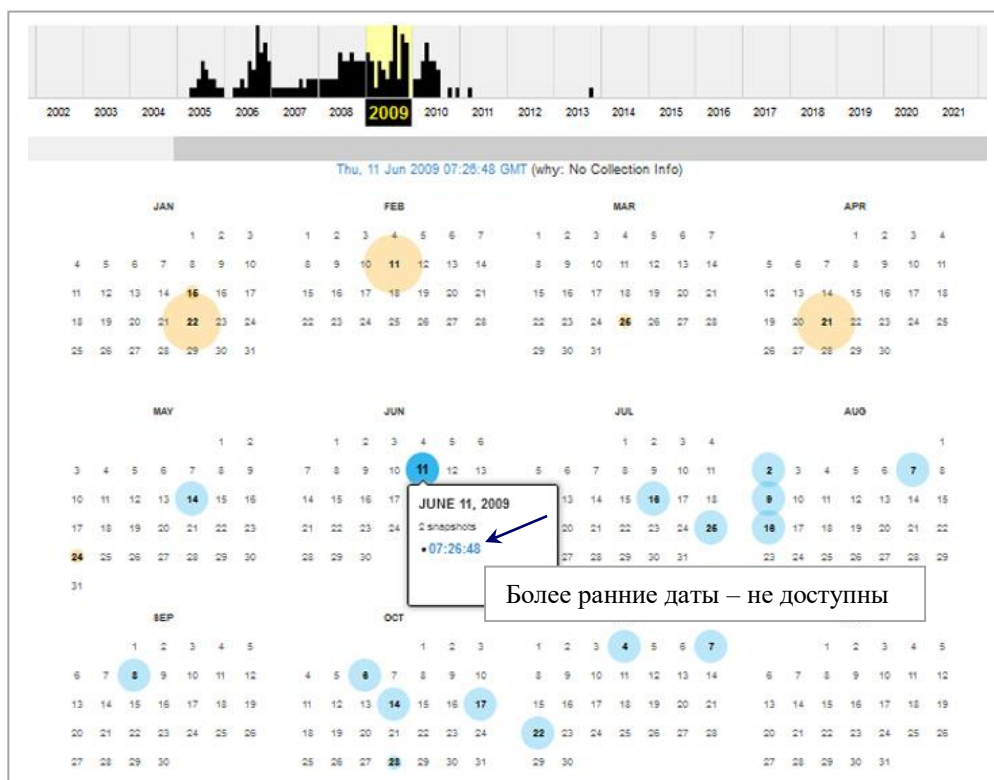
Seul le virus grippal A est capable de provoquer des pandémies. En cas de changement majeur dans l'une des deux, ou les deux, protéines de surface du virus grippal A, personne n'est protégé car on se trouve en présence d'un virus entièrement nouveau. Lorsque le virus peut également se transmettre d'une personne à une autre, une pandémie est possible.

Des pandémies mondiales sont signalées depuis des siècles. Celles pour lesquelles on dispose des informations les plus complètes remontent à 1918 (H1N1, grippe espagnole), 1957 (H2N2, grippe asiatique) et 1968 (H3N2, grippe de Hong Kong).

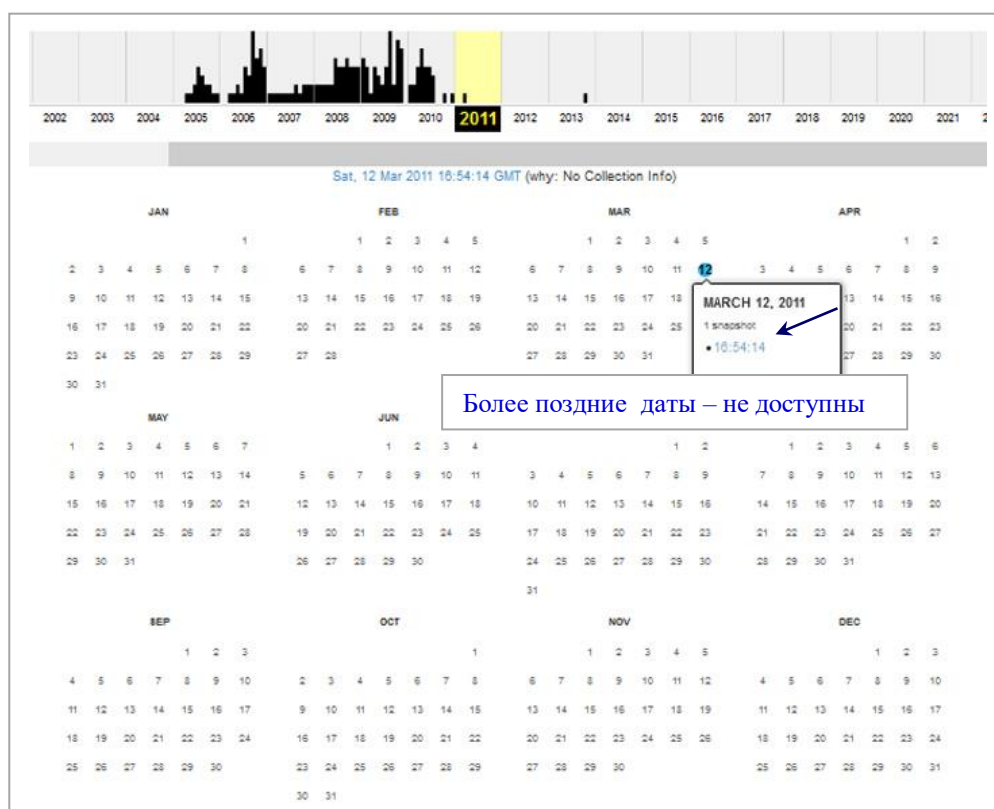
Conséquences d'une pandémie de grippe

Les pandémies de grippe survenues au XXe siècle sont responsables **de millions de décès, de bouleversements sociaux et de pertes économiques considérables dans le monde entier**. Les spécialistes de la grippe conviennent de l'éventualité d'une autre pandémie mais ils ne peuvent dire quand elle se produira. (p. vi-vii)

Веб-сайт ВОЗ, посвященный пандемии гриппа Оповещение об эпидемиях и пандемиях и ответные действия (EPR)



https://web.archive.org/web/20090701000000*/http://www.who.int/csr/disease/influenza/pandemic/ru/index.html



https://web.archive.org/web/20090701000000*/http://www.who.int/csr/disease/influenza/pandemic/ru/index.html

Оповещение об эпидемиях и пандемиях и ответные действия (EPR)

Готовность к пандемии

Женева, ВОЗ, 11 июня 2009

<https://web.archive.org/web/20090611072648/http://www.who.int/csr/disease/influenza/pandemic/ru/index.html>

The screenshot shows the WHO website interface in Russian. The main header includes navigation links for various languages (Arabic, Chinese, English, French, Russian, Spanish) and a search bar. The left sidebar contains a menu with links to 'Главная страница', 'Информация о ВОЗ', 'Страны', 'Вопросы здравоохранения', 'Публикации', 'Данные и статистика', 'Программы и проекты', 'Главная страница EPR', 'Оповещение и ответные действия', 'Болезни', 'Глобальная сеть оповещения о вспышках болезней и ответных действий', and 'Международные медико-санитарные правила'. The main content area is titled 'Оповещение об эпидемиях и пандемиях и ответные действия (EPR)' and features a sub-header 'Готовность к пандемии'. Below this, there are links to a 'Контрольный вопросник ВОЗ для планирования готовности к пандемии гриппа' and 'Полная информация о гриппе А(H1N1)'. The section 'Что представляет собой пандемия гриппа?' explains that a pandemic occurs when the number of cases exceeds the usual level, often due to a new virus to which people have no immunity. It also mentions the WHO's role in coordinating global response. The 'Потенциальные последствия' section discusses the historical impact of the 1918-1919 influenza pandemic, noting that it caused significant social disruption and death, with estimates ranging from 40 to 50 million deaths worldwide.

Что представляет собой пандемия гриппа?

Эпидемия той или иной болезни возникает тогда, когда число случаев этой болезни превышает обычный уровень. **Пандемия представляет собой эпидемию той или иной болезни в мировом масштабе.** Пандемия гриппа может возникнуть в том случае, когда появляется какой-либо новый вирус гриппа, против которого у людей нет иммунитета. В условиях увеличения масштабов перевозок на глобальном уровне, а также урбанизации и перенаселенности в некоторых районах, эпидемия, вызванная каким-либо новым вирусом гриппа, может распространиться во всем мире и превратиться в пандемию быстрее, чем это наблюдалось ранее. В целях создания глобальной системы оказания странам помощи в обеспечении готовности к пандемии и планирования необходимых мер ВОЗ определила соответствующие фазы пандемии. Пандемии - в зависимости от степени тяжести вызванной ими болезни и смертности - могут быть слабыми или серьезными, причем в ходе пандемии уровень ее серьезности может меняться.

Потенциальные последствия

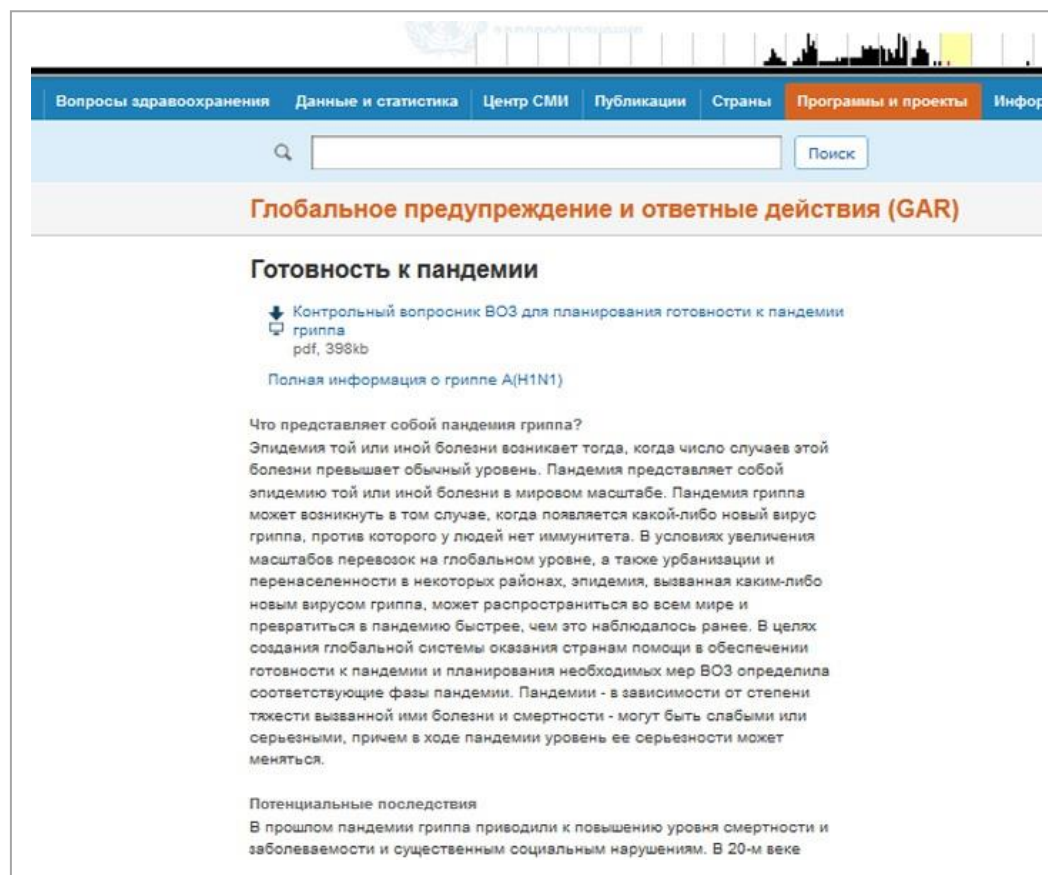
В прошлом пандемии гриппа приводили **к повышению уровня смертности и заболеваемости** и существенным социальным нарушениям.

Глобальное предупреждение и ответные действия (GAR)

Готовность к пандемии

Женева, ВОЗ, 12 марта 2011

<https://web.archive.org/web/20110312165414/http://www.who.int/csr/disease/influenza/pandemic/ru/index.html>



Что представляет собой пандемия гриппа?

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Потенциальные последствия

В прошлом пандемии гриппа приводили **к повышению уровня смертности и заболеваемости** и существенным социальным нарушениям.

Global Alert and Response (GAR)

Geneva, WHO, 19 January 2022; 05:57:20

<https://web.archive.org/web/20220119055720/http://www.who.int/influenza/pandemic/en/>



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- If you still encounter problems, please report these using the [feedback page](#).

Part 3

DOCUMENTS RELATED TO THE CHANGING DEFINITION OF PANDEMIC ON THE WHO WEBSITE





Emerging Infections: Influenza Pandemic Facts

CDC, Media Relations Division, 31 December 1997

<http://web.archive.org/web/20050503194920/http://www.cdc.gov/od/oc/media/pressrel/panfacts.htm>

Pandemics result from the emergence of an influenza A virus that is novel for the human population. The hallmark of pandemic influenza is **excess mortality – the number of deaths observed during an epidemic of influenza-like illness in excess of the number expected.**

During this century, pandemics occurred in 1918, 1957, and 1968.

1918-19 “Spanish flu” A(H1N1) – caused the highest known influenza-related mortality – at least 500,000 deaths in the United States, and 20 million worldwide.

1957-58 “Asian flu” A(H2N2) – 70,000 deaths in the United States.

1968-69 “Hong Kong flu” A(H3N2) – 34,000 deaths in the United States.

Although mortality rates associated with the recent pandemics of 1957 and 1968 were confined primarily to the elderly and chronically ill, both pandemics were associated with high rates of illness and social disruption, with combined economic losses of approximately \$32 billion (in 1995 dollars).

The potential impact of an influenza virus in humans depends on whether there is protective immunity in the population, the virus’ ability to be passed from person to person and its virulence (ability to cause severe illness or death).

Influenza viruses undergo two kinds of change. One is a series of mutations overtime that cause a gradual evolution of the virus, known as antigenic drift. The other is an abrupt change in the surface antigen proteins, known as anitgenic shift, thus suddenly creating a new subtype of the virus.

When antigenic shift occurs, the population does not have antibody protection against the virus.

Birds are the primary reservoir for influenza viruses. All 15 recognized influenza A subtypes have been found in birds. Only 3 influenza subtypes have circulated widely in humans until this summer: H3N2, H1N1, and H2N2.

In most years in the United States, influenza is responsible for 10,000-40,000 excess deaths, 50,000-300,000 hospitalizations, and approximately \$1-3 billion in direct costs for medical care.

**Quarantine Act:****Regulations Amending the Quarantine Regulations**

Registration - SOR/2004-31; 8 March 2004

Loi Sur La Quarantaine:**Règlement modifiant le Règlement sur la quarantaine**

Enregistrement - DORS/2004-31; 8 mars 2004

Canada Gazette (Ottawa), 24 March 2004 // 24 Mars 2004, Part II, Vol. 138, N 6, p. 113

https://www.google.com.my/books/edition/The_Canada_Gazette/b11KAQAIAAJ?hl=en&gbpv=0&bsq=%22enormous%20numbers%20of%20deaths%20and%20illness%22

2004-03-24 *Canada Gazette Part II, Vol. 138, No. 6**Gazette du Canada Partie II, Vol. 138, n° 6* **SOR/DORS/2004-31****Influenza Pandemic**

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness¹.

Pandémie d'influenza

Une pandémie d'influenza se produit lorsqu'un nouveau virus grippal contre lequel la population humaine n'a aucune immunité apparaît et que ce virus cause plusieurs épidémies simultanées à l'échelle mondiale avec de nombreux morts et maladies¹.

Influenza Pandemic

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness.¹

Influenza A and influenza B are 2 of the 3 types of influenza viruses associated with annual outbreaks and epidemics of influenza. The third type, influenza C, causes only mild disease and has not been associated with widespread epidemics or pandemics. Annual outbreaks of influenza are due to minor changes in the surface proteins of the viruses that enable the viruses to evade the immunity humans have developed after previous infections with the viruses or in response to vaccinations.²

Only the influenza A virus can cause pandemics. When a major change in either one or both of their surface proteins occurs spontaneously, no one will have partial or full immunity against infection because it is a completely new virus. If this new virus also has the capacity to spread from person-to-person, then a pandemic is most likely to occur.³

Pandémie d'influenza

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L'influenza de type A et l'influenza de type B sont deux des 3 types de virus grippaux associés aux flambées et aux épidémies annuelles d'influenza. Le troisième type, l'influenza de type C, cause seulement des maladies bénignes et n'a pas été associé à des épidémies ou des pandémies étendues. Les flambées annuelles d'influenza sont dues aux changements mineurs dans les protéines de surface des virus qui leurs permettent d'esquiver l'immunité que les humains ont développé par suite d'infections antérieures des virus ou de vaccinations.²

Seul le virus d'influenza de type A peut causer des pandémies. Lorsqu'un changement important dans un ou les deux de leurs protéines de surface se produit, aucune personne ne sera immunisée, partiellement ou complètement, contre l'infection, car c'est une nouvelle forme du virus. Si ce nouveau virus a aussi la capacité de se propager d'une personne à une autre, alors les chances de pandémie sont très élevées.³

1. Pandemic Preparedness, World Health Organization, <http://www.who.int/csr/disease/influenza/pandemic/en/>

2. Ibid

3. Ibid



ФЕДЕРАЛЬНАЯ СЛУЖБА ПО НАДЗОРУ В СФЕРЕ ЗАЩИТЫ ПРАВ
ПОТРЕБИТЕЛЕЙ И БЛАГОПОЛУЧИЯ ЧЕЛОВЕКА

Геннадий Онищенко

О подготовке к возможной пандемии гриппа
Постановление № 11

Роспотребнадзор, 27 декабря 2004

<http://62.rospotrebnadzor.ru/content/postanovlenie-ot-27122004-no-11-o-podgotovke-k-vozmozhnoy-pandemii-grippa>

Я, Главный государственный санитарный врач Российской Федерации Г.Г.Онищенко, проанализировав эффективность действующей системы эпидемиологического надзора за гриппом и острыми респираторными заболеваниями (ОРЗ) установил, что в связи с вероятностью возникновения пандемии гриппа возникла необходимость внесения корректив с целью предотвращения или снижения ущерба здоровью населения и экономике страны от распространения нового высокопатогенного вируса гриппа.

В последние годы регистрируются локальные очаги гриппозной инфекции с высокой смертностью среди инфицированных людей, имевших контакт с инфицированными птицами. Такие вспышки гриппа имели место в 1997 г. в Гонконге (вирус гриппа А H5N1), в 2003 г. в Нидерландах (вирус гриппа А H7N7), в 2003-2004 гг. в Таиланде, Вьетнаме, Китае и других странах Юго-Восточной Азии (вирус гриппа А H5N1). Заболевания гриппом среди людей отличались крайне тяжелым клиническим течением и высокой летальностью, достигнув в Таиланде и Вьетнаме 70%, что свидетельствует об изменении биологических свойств птичьих вирусов в сторону усиления патогенности для человека.

Всемирная организация здравоохранения (ВОЗ) прогнозирует появление в ближайшие годы нового антигенного варианта вируса гриппа, что может привести к развитию крупной пандемии гриппа с **4-5 кратным ростом заболеваемости и 5-10 кратным ростом смертности**.

Все это требует координации деятельности заинтересованных федеральных органов исполнительной власти, органов исполнительной власти субъектов Российской Федерации, органов управления здравоохранением, органов, осуществляющих государственный санитарно-эпидемиологический надзор, ветеринарный надзор с целью улучшения эпидемиологического надзора и повышения готовности к возможному возникновению пандемии гриппа.

В целях обеспечения готовности к пандемическому распространению вируса гриппа в Российской Федерации и в соответствии с Федеральным законом О санитарно-эпидемиологическом благополучии населения от 30.03.1999 г. № 52-ФЗ ст. 51 (Собрание законодательства Российской Федерации, 1999, № 14, ст. 1650) постановляю:

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Los Angeles Times

Kathleen Doheny

Avian Flu risk low for tourists, but experts fear virus mutation

Los Angeles Times (Los Angeles, CA), 13 March 2005, Sun, p. L3.

<https://www.newspapers.com/image/192659938/?terms=%22with%20enormous%20numbers%20of%20deaths%20and%20illness%22&match=1>

As temperatures remain cool in Asian countries, the Centers for Disease Control and Prevention in Atlanta predicts more out-breaks of avian, or bird, flu among poultry there. Although the current outbreak is not considered risky for most tourists, epidemiologists are worried the viruses could mutate and acquire the ability to spread efficiently from person to person.

Last month, the CDC elevated its outbreak notice on avian influenza to a travel health precaution because the disease had spread in Vietnam. As of press time Tuesday, 60 human cases of avian flu had been diagnosed in Cambodia, Thailand and Vietnam, including 43 deaths. So few cases may not seem like cause for alarm, but health experts worldwide fear that if the avian flu virus and a human influenza virus were to simultaneously infect a person, it could form a new, mutated virus.

"And the new virus might acquire the ability to spread easily person to person in a sustained manner" and result in a global pandemic of the H5N1, the strain of bird flu now occurring, says Dr. Tim Uyeki, an epidemiologist with the CDC influenza branch.

"An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide **with enormous numbers of deaths and illness**," according to the World Health Organization.

For now, the risk for most tourists to Asia is minuscule, especially if they take simple precautions and aren't exposed to infected poultry.

Travelers shouldn't cancel their plans, Uyeki says. "There are no travel restrictions. We aren't saying, 'Don't visit those countries.' The situation right now is that H5N1 is going from poultry to people, and in a small number of cases there has been probably limited person-to-person transmission."

The viral infection typically strikes wild birds but can also affect chickens and other poultry. Humans are infected when exposed to sick birds, uncooked poultry or contaminated surfaces, the CDC says.

Symptoms include fever, cough and sore throat. The infection in people is often fatal, and no human vaccine is available. The human influenza vaccine offers "zero protection" against H5N1, Uyeki cautions.

The first documented human infections were in Hong Kong in 1997, WHO reports. In that outbreak, 18 people were hospitalized and six died.

"There has not been one case in an American," Uyeki says. The risk for an American who is going to these countries of get-ting infected with H5N1 is extremely low. It is extremely unlikely unless they are . . . having direct contact with a sick or dead [infected] chicken or duck or drinking raw duck blood, a delicacy in Vietnam. Avoid any con-tact with poultry, period."

For other recommendations, see the CDC website for travelers, www.cdc.gov/travel.

An Orange County physician agrees with Uyeki. "There are so few human cases that I don't think restricting travel is an issue yet," says Dr. Cherie Hinchliffe, a Laguna Beach internist who specializes in travel medicine. She tells her patients, "Stay away from farms and open-air markets. Avoid domesticated birds. Stay away from zoos and aviaries." If you are taking children, she adds, supervise their hand washing "because they are usually poor hand washers and often have their hands in their mouths." If you are ill, cancel the travel plans, she says. "It might make you more susceptible."



On Examining an Effective and Immediate Public Health Response in the Aftermath of a Terrorism Attack

Hearing of the Committee on Health, Education, Labor, and Pensions,
United States Senate, One Hundred Ninth Congress, First Session.

Roundtable Discussion: When terror strikes –
Preparing an effective and Immediate Public Health Response

United States. Congress. Senate. July 14, 2005, p. 8

https://www.google.com.my/books/edition/Roundtable_Discussion/V3qRAAAAIIAJ?hl=en&gbpv=1&dq=%22with+enormous+numbers+of+deaths+and+illness%22&pg=PA8&printsec=frontcover

Response to questions of the committee by Leah Devlin

An important role for the Federal Government is to work collaboratively to assure a stable, predictable market for biodefense medical countermeasures and to address related liability issues. Public health, with an adequately built and maintained infrastructure, can then guarantee timely distribution of these countermeasures to ultimately protect the American population from preventable illness and death.

The three main strategies needed to maintain a robust public health infrastructure are a commitment to an all hazards approach, a trained workforce, and sustainable funding. These three factors, commitment, people and resources, will see the Nation into a safer, more protected, and better-prepared future. The multiple agencies and industries involved in the food chain must integrate and coordinate their surveillance, risk vulnerability, and mitigation plans. Human health, livestock and crop protection must be viewed as a single system for the development of surveillance systems, standardized plans, and training for local, State, Federal, and industry stakeholders.

Question 1. What additional incentives or other measures will ensure the timely availability of sufficient amounts of effective biodefense medical countermeasures, and is the cost of such incentives acceptable?

Answer 1. Biodefense medical countermeasures are one essential component of an effective preparedness and response effort which must also include surveillance, early detection, quarantine, isolation, distribution of biodefense medical countermeasures including mass vaccination, mass care and public communications. Having said this, at this critical point in history, the alignment of incentives in the production of biodefense medical countermeasures (mainly vaccines and anti-infective drugs) must hinge on the ability of Government, business, and public health to adequately plan together for these exigencies. This fundamental concept will be articulated using the examples of pandemic influenza, a natural event, and the dispersal of anthrax spores, a deliberate event.

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in simultaneous epidemics world-wide with **enormous numbers of deaths and illness**.

Because of the ongoing and unprecedented spread of highly pathogenic avian influenza type H5N1 in SE Asia, the global alarm for the next human influenza pandemic has been sounded by the WHO. The toll in the United States using a mid-point estimate of a 25 percent attack rate and a 5 percent mortality rate would result in 3 million deaths and 10 million hospitalizations, 10 to 100-fold greater than the numbers experienced during a typical wintertime flu season.

...

PANDEMIC FLU

[Jane Leese] DH/HPIH&SD/Immunisation Policy, Monitoring & Surveillance

UK Health Departments' Influenza pandemic contingency plan

London: NHS, Department of Health Publications; 20 October 2005, p. 4

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiBupuevtb_AhWUa2wGHX7HDcsQFn0ECA4QAQ&url=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fgovernment%2Fuploads%2Fsystem%2Fuploads%2Fattachment_data%2Ffile%2F61336%2Fintro_staffadvice_flu_planning.pdf&usg=AOvVaw3uIPsn4QSkk3z-f3vU8-ZH&opi=89978449

4 UK Influenza Pandemic Contingency Plan

Executive summary

Pandemics of influenza have swept the world from time to time throughout history, three times in the last century. They caused widespread illness, large numbers of deaths, including among children and young adults, and huge societal disruption, concentrated in just a few weeks. There is currently rising concern that a new influenza virus with pandemic potential will emerge and spread, and a further pandemic can be expected. When that will be is not known, but the consequences, when it does, will be serious. Around a quarter of the population could be affected, with over 50,000 deaths in the UK alone. This could be over one or more waves, each lasting around 3 months.

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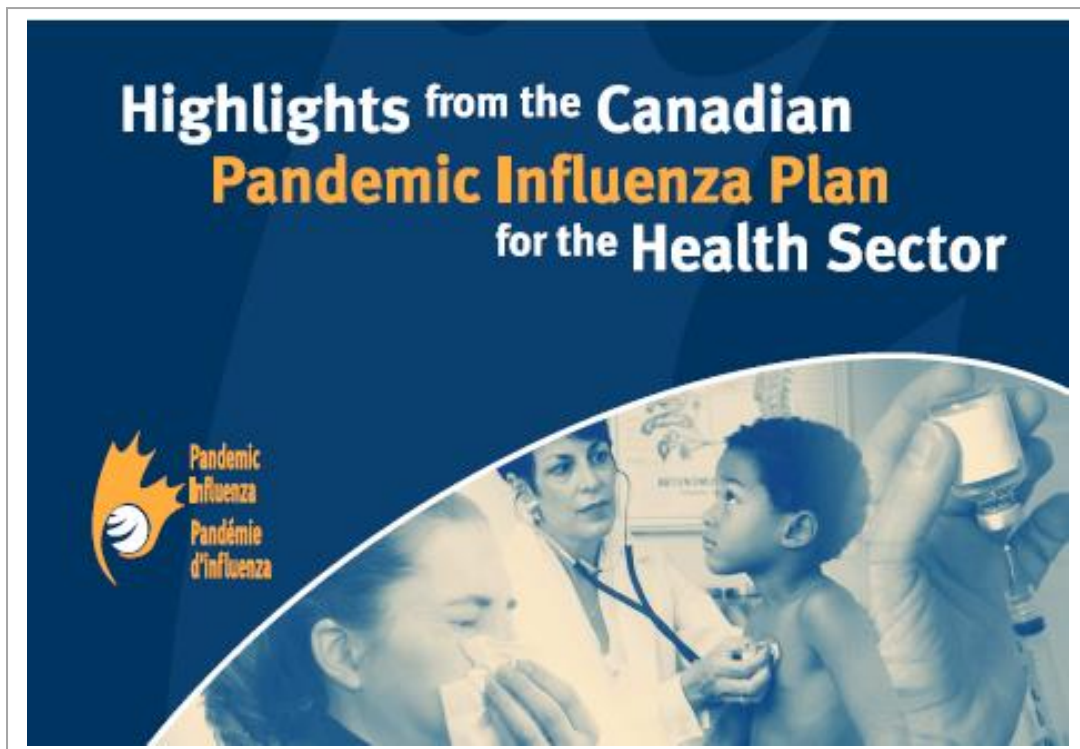
This document updates the March 2005 UK Influenza Pandemic Contingency Plan. It sets the scene and provides the overall framework for the UK's response to an influenza pandemic. It is based on current advice from the World Health Organization for national pandemic plans. The response is divided into phases, starting with work to be done before a pandemic or potential pandemic emerges, followed by a stepwise escalating response as a pandemic evolves.



Highlights from the Canadian pandemic influenza plan for the Health Sector Preparing for an influenza pandemic, the Canadian health perspective

Public Health Agency of Canada, 2006, p. 4

<https://govdocs.vre3.upei.ca/islandora/object/govdocs%3A1098>



Influenza Pandemic

Sometimes a completely new form of influenza virus appears and starts to cause illness in humans. When this happens, it is easy for this new subtype to spread from person to person since most people will not have immunity to the new strain of virus. An influenza pandemic results if **many people around the world become ill and die from such a virus**. Influenza pandemics have occurred three to four times per century.

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BIRD FLU

Health, Safety and
Contingency Guidelines

Maddula R. Reddy (editor)

Bird Flu: Health, Safety and Contingency Guidelines

Delhi, India: SBS Publishers, 1 December 2007, p. 16

https://www.google.com.my/books/edition/Bird_Flu/_0BWAAAAAYAAJ?hl=en&gbpv=0&bsq=%22with%20enormous%20numbers%20of%20deaths%20and%20illness%22

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness. With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

gain the ability to spread easily from person to person, an “influenza pandemic” could begin.

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New Influenza Virus: How It Could Cause A Pandemic

Debbie Weston

Debbie Weston

Infection prevention and control: Theory and clinical practice for healthcare professionals

Chichester, West Sussex, UK, John Wiley & Sons, Ltd., 2008, p. 241.

<https://archive.org/details/infectionprevent0000west>

Every year there are reports of seasonal epidemics of influenza, which are estimated to kill between 500,000 and 1 million people globally,⁵⁹⁴ and in the UK alone 10-15 % of the population are affected, with 12,000 deaths occurring predominately among the elderly and those with pre-existing respiratory disease.

Influenza viruses have an amazing ability to change their genetic make-up and essentially recreate themselves, and they are described as 'the chameleons of the microbial world'.⁵⁹⁴

Pandemics of influenza have been reported since the sixteenth century, and are associated with high morbidity, excess mortality and social and economic disruption. Pandemic influenza is now regarded by many experts as the most significant global public health emergency caused by a naturally occurring pathogen.⁵⁹⁵ and the problems seen in Asia and other parts of the world since 2003 with the highly pathogenic H₅N₁ avian influenza virus, now capable of causing severe disease in humans, suggests that the world is closer now to a pandemic than at any time since the 1960s.⁵⁹⁶

...

594. Department of Health (2002) *Explaining Pandemic Flu: A Guide from the Chief Medical Officer*. DoH. London.

595. World Health Organization (2005) *Avian influenza: Assessing the pandemic threat*. WHO. Geneva.

596. House of Lords Select Committee on Science and Technology (2006) Fourth Report. *Pandemic Influenza*. www.publications.parliament.uk/pa/flld200506/1dselecifldsctechr/88/8805.htm.

INTRODUCTION

Every year there are reports of seasonal epidemics of influenza, which are estimated to kill between 500,000 and 1 million people globally⁵⁹⁴, and in the UK alone 10–15 % of the population are affected, with 12,000 deaths occurring predominately among the elderly and those with pre-existing respiratory disease. Influenza viruses have an amazing ability to change their genetic make-up and essentially recreate themselves, and they are described as 'the chameleons of the microbial world'.⁵⁹⁴ Pandemics of influenza have been reported since the sixteenth century, and are associated with high morbidity, excess mortality and social and economic disruption. Pandemic influenza is now regarded by many experts as the most significant global public health emergency caused by a naturally occurring pathogen⁵⁹⁵, and the problems seen in Asia and other parts of the world since 2003 with the highly pathogenic H₅N₁ avian influenza virus, now capable of causing severe disease in humans, suggests '... that the world is closer now to a pandemic than at any time since the 1960s'.⁵⁹⁶ Pandemic influenza has the potential to circle the globe



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Getting Beyond Getting Ready for Pandemic Influenza

Committee on Homeland Security, U.S. ADA493591

House of Representatives, Washington, DC, January 2009. Endnote # 5. P. 21

<https://apps.dtic.mil/sti/citations/ADA493591> ; <https://apps.dtic.mil/sti/pdfs/ADA493591.pdf>

Executive Summary

Overview

Pandemic influenza is not a new phenomenon. Historically, there have been other influenza pandemics,¹ enough so that we now believe the planet is well overdue.² We watch avian influenza move across the world,³ worry about how more than 60% of those people that contract the disease die from it,⁴ and realize that further mutations in currently circulating strains **could cause them to easily infect human beings**.⁵ If that happens, with an already high death rate,⁶ we expect that hundreds of thousands if not millions would die,⁷ that every country would be affected,⁸ and that society would function poorly at best.⁹ Expressions of culture and government – scenarios, exercises, movies, fiction, and nonfiction – have articulated our fears of an infectious disease for which we have no immediately available cure.

EXECUTIVE SUMMARY

OVERVIEW

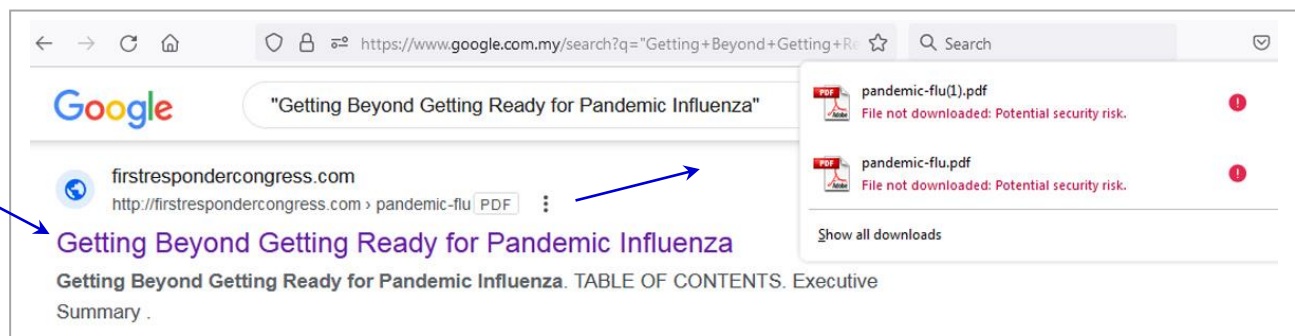
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5. “An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide with **enormous numbers of deaths and illness**.” World Health Organization. Pandemic Preparedness: consequences of an influenza pandemic.

See: <http://www.who.int/csr/disease/influenza/pandemic/en/>.

A Link to this document in the Google:

https://www.google.com.my/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwi97Nbpd3_AhV5xzgGHQ34BKYQFnoECA0QAQ&url=http%3A%2F%2Ffirstrespondercongress.com%2Fpandemic-flu.pdf&usg=AOvVaw2kmL0XZe9_HFmHBF0lQMg9&opi=89978449



Chris Berdik

**Discussing the Scary Word 'Pandemic':
Public Health prof. David Ozonoff is keeping cool, but yes, he's worried**

Boston University Today, 29 April 2009

<https://www.bu.edu/articles/2009/discussing-the-scary-word-pandemic/>

As swine flu continues to spread, the World Health Organization yesterday raised its alert level to Phase 4, indicating that “the likelihood of a pandemic has increased, but not that a pandemic is inevitable.” Phase 6 would mean that a global pandemic is under way.

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People in Mexico were wearing face masks in public yesterday. Photo by hmerinomx

For insights into the swine flu scare, BU Today put some questions to epidemiologist David Ozonoff, a School of Public Health professor of environmental health. BU Today:

What is swine flu and is this the first time it's been transmitted from human to human?

Ozonoff: Influenza is actually a group of viruses, and most infect animals. A few infect humans. Pigs get the flu and have for a long time. It has been true that there have been times when swine influenza has passed to human beings. In fact, the current strain, H1N1, was at one point thought to be the source of the 1918 pandemic. But more recent thinking is that it was likely the other way around – that we gave it to pigs in 1918, and that we likely got it from an avian source.

Pigs infected with H1N1 get sick, but it usually doesn't pass to humans. Every year, the CDC gets a report of one or two cases of people infected with swine flu, but in recent years it's been a couple or three. And there have been instances – in 1976 and 1988 – when there was a small outbreak with human-to-human transmission, but it burned itself out after one generation. The current situation seems to be different. It's probable that several generations of this virus have been passed through human-to-human transmission, and it seems to be more easily transmissible.

Don't thousands of people die every year from "normal" flu? Why is swine flu more dangerous?

So far, it seems to look a lot like seasonal influenza. But the difference is that it's a type of flu to which humans have never, or very rarely, been exposed. We have a globe's worth of immunologically naïve people. So any flu virus for which there's basically no natural immune response is a recipe for a pandemic virus, which means a sustained human-to-human transmission happening in many places in the world. Now, "[pandemic](#)" is a scary word, because it's applied to the 1918 flu, but it's also applied to other things that aren't as deadly, like head lice. It really isn't a reflection of the severity of the disease, but that a lot of people are getting the disease in a lot of places at once.

How concerned should we be?

There are three broad possibilities. First, it could just burn itself out and go away and we'll never see it again. That's the best scenario. The other two scenarios are more likely. This could develop into a full-fledged pandemic, and we'd be off to the races. The third possibility has lots more uncertainty, but may be the most likely, and that is that we don't have too much flu around in the summertime in the northern hemisphere. [We don't know where it goes really](#). But then it comes back again in late summer or early fall. That's sort of what happened in 1918. There was a relatively mild outbreak in the spring, and when it poked its head up again in August, it was a full-fledged monster.

...

Which precautions do you think are worth taking?

Hand and cough hygiene doesn't cost much, and makes people feel better. I don't know how much good it does, but it's reasonable. Then there are the things described as personal responsibility, such as don't go to work if you're sick or don't send your kid to school sick. But if I'm teaching a class and there are two classes left and a final exam and I don't feel well, am I going to abandon the students? It's one thing to say it's my responsibility not to go to work sick, but another thing to understand what it's like on the ground for people.



Pandemic Influenza Preparedness & Response Plan

**Big Sandy Community & Technical College Environmental Health & Safety Committee
Incorporated as an Appendix To Big Sandy Community &
Technical College Safety Manual & Crisis Management Plan**

Big Sandy, Community & Technical College, April 2009, p. 2.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjWt8K7xOr_AhUESmwGHZG-AXA4ChAWegQIDRAB&url=https%3A%2F%2Fbig sandy.kctcs.edu%2Fcurrent-students%2Fmedia%2Fpandemicinfluenzaplan.pdf&usg=AOvVaw3mpzjIB-oAS-o5UgZMZv3i&opi=89978449

Planning Overview

The Office of the President for Kentucky Community and Technical College System (KCTCS) having recognized the potential threat of a world-wide influenza pandemic, and the potential impact it could have on all Kentucky Community and Technical Colleges instructed all locations to develop a plan to respond to the effects such an outbreak would create.

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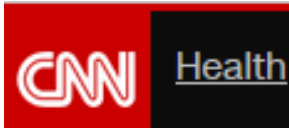
This Pandemic Influenza Plan was written specifically for Big Sandy Community and Technical College (BSCTC) by the appointed Crisis Management Team. It is the intent of this plan to identify key important actions BSCTC may need to undertake for the preparation of, and response to an influenza outbreak resulting in business interruption. Continued plan surveillance and updating will be required to ensure that the Pandemic Influenza Plan effectively addresses the unique needs of BSCTC.

Background

According to the World Health Organization (WHO), “An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several simultaneous epidemics worldwide **with enormous numbers of deaths and illness**. With the increase in global transport and communications, as well as urbanization and overcrowded conditions, epidemics due to the new influenza virus are likely to quickly take hold around the world.”

Influenza is a highly contagious respiratory virus that is responsible for annual epidemics in the United States and other countries. Each year an average of 200,000 people are hospitalized and 36,000 die in the U.S. from influenza infection or a secondary complication. During an influenza pandemic the level of illness and death from influenza will likely increase dramatically worldwide.

The impact of an influenza pandemic on the local economy and business processes could be devastating. It is estimated that 15-35% of the population will be affected. There is a potential for high levels of illness and death, as well as significant disruption to society and our economy, making planning for the next influenza pandemic imperative.



Elizabeth Cohen

When a pandemic isn't a pandemic

CNN, Health, May 4 2009; Updated 22:42 GMT (06:42 HKT)
<https://edition.cnn.com/2009/HEALTH/05/04/swine.flu.pandemic/index.html>

Atlanta, Georgia (CNN) – When the World Health Organization raised its influenza pandemic alert from a Phase 4 to a Phase 5 last week, there was a bit of a gasp heard round the world.

News about the pandemic sent people to line up at a mobile health clinic in Mexico City.

After all, Phase 5 "is a strong signal that a pandemic is imminent," according to WHO.

"All countries should immediately activate their pandemic preparedness plans," the organization's director-general, Dr. Margaret Chan, said Wednesday. "After all, it really is all of humanity that is under threat during a pandemic."

But the word "pandemic" isn't quite as scary as it sounds, explained **David Ozonoff**, professor of environmental health at the Boston University School of Public Health.

"When people hear the words 'pandemic' and 'flu,' the first thing that comes to mind is 1918, which was a real horror show," Ozonoff said, referring to the flu pandemic that killed some 50 million people 91 years ago. But you can have a pandemic without a large number of deaths, he said. "The word pandemic refers to how widely dispersed a disease is, not to how severe the disease is," he said.

Confusion about the meaning of "pandemic" is understandable, Ozonoff said, considering the definition of the word is "not set in stone."

Until Monday morning, the WHO *had a definition* on its Web site saying that a pandemic flu causes "*enormous numbers of deaths and illness*." After a CNN reporter pointed this out, WHO spokeswoman *Natalie Boudou*¹ called back to say the *definition was in error* and had been pulled from the WHO Web site.

"It was a mistake, and we apologize for the confusion," she said. "(That definition) was put up a while ago and paints a rather bleak picture and could be very scary."

The correct definition is that "pandemic" indicates outbreaks in at least two of the regions into which WHO divides the world, but has nothing to do with the severity of the illnesses or the number of deaths.

Based on lessons from the past, "influenza may cause mild disease in affluent countries, but more severe disease, with higher mortality, in developing countries," Chan said at Wednesday's news conference.

There have been three influenza pandemics in this century, said Andrew Pekosz, associate professor of microbiology and immunology at Johns Hopkins University's Bloomberg School of Public Health. The other two, in 1957 and 1968, also were caused by new viruses to which no one had immunity, but didn't cause nearly the number of deaths as the one in 1918.

"I think people need to be reminded that this current H1N1 outbreak is going to resemble much more the pandemics in 1957 and 1968, where there was an increase in deaths from other years, but nothing like the millions of deaths we saw in 1918," Pekosz said.

¹ Natalie Boudou-Jacobs, Communications Officer, WHO Geneva, email: boudoun@who.int See: <https://web.archive.org/web/20130617215844/http://www.who.int/mediacentre/news/notes/2008/np11/es/>

Learn from brush with swine flu

St. Cloud Times (Saint Cloud, MN), 11 May 2009, Mon, p. 9

<https://www.newspapers.com/image/224944553/?terms=%22with%20enormous%20numbers%20of%20deaths%20and%20illness%22&match=1>

Pick the basic definition of pandemic:

- A. literally one "dem" away from panic!
- B. causing enormous numbers of deaths and illness.
- C. affecting or tending to affect a disproportionately large number of individuals within a population, community, or region at the same time.
- D. occurring over a wide geographic area and affecting an exceptionally high proportion of the population.

OK, first, we're just kidding with 'A.'

If you picked "B," it might have been because up until a week ago today, the World Health Organization's definition of pandemic included those exact terms.

If you picked C, well, that's the definition for epidemic.

So the correct answer is D, according to Merriam-Webster's online dictionary.

We bring these terms to your attention because today marks two weeks since the global "swine flu" pandemic began to reach its peak, at least in terms of creating uncertainty, hype and even panic. With the Worst hopefully past, it's 'important to glean a couple of lessons.

Words matter

The first lesson focuses on definitions, especially "pandemic."

A pandemic essentially describes an illness that has spread beyond just one country. The WHO now says its definition indicates outbreaks in at least two of the six regions into which it divides the world, but it is not defined by severity or the number of deaths.

Epidemic means the illness is contained to a smaller region, perhaps a single country or even community. And like pandemic, the word has nothing to with severity of the illness or if it's fatal.

So is this H1N1 bug an influenza pan-demic?

By definition, the answer appears to be yes, although more research will be need-ed to determine if it impacts high enough proportions of the global population.

Still, if H1N1 is a flu pandemic, at this point it remains one far removed from historical proportions.

Health experts generally agree the only three flu pandemics since 1900 occurred in 1918-19, 1957-58 and 1968-69. Their death tolls respectively were estimated at 20 million to 40 million in 1918-19 and from 1 million to 4 million for the other two. As of Friday, WHO reported 1,112 laboratory confirmed human cases of H1N1, including 42 deaths worldwide.

Overhyped? Such numbers allow for another lesson: Keep things in perspective.

Central Minnesota and especially the Cold Spring area experienced firsthand how today's relentless 24/7 media culture can quickly overshadow common sense. From the governor traveling to Cold Spring for a simple news conference to the national airwaves being filled with constant expert analysis, perhaps the most important thing to remember is to avoid media overload.

The future

Please don't think we are trying to close the book on H1N1. History shows that would be foolish. What people should do is learn from these experiences the past few weeks. That starts with knowing "pandemic" is not a synonym for "panic" and that sooner or later we will face similar circumstances again.

Declan Butler

When is a pandemic not a pandemic?

Nature, 21 May 2009, 453(7194): <https://doi.org/10.1038/news.2009.501>
<https://www.nature.com/articles/news.2009.501#citeas>

Arguments about the pandemic status of swine flu are a distraction from tackling the outbreak, warns Declan Butler.

As the influenza A (H1N1) swine flu virus fans out across the globe, there can be little doubt that we are already in the early stages of a flu pandemic. Nonetheless, there is considerable resistance to calling it a pandemic.

On 29 April, the World Health Organization (WHO) moved its assessment of the pandemic threat to phase 5 on its six-point scale, indicating that the new virus had caused "sustained community level outbreaks in two or more countries in one WHO region".

And that is where the threat level has sat ever since – one point short of official global pandemic status. The current definition of phase 6 requires that there are "sustained community level outbreaks in at least one other country in a different WHO region". That criterion will almost certainly be met sooner or later.

Level 6 does not mean that we are facing the end of the world. Margaret Chan, WHO ...

Yet this week Margaret Chan, director-general of the WHO, came under pressure from member states – including the United Kingdom and Japan – to move the goalposts to delay or prevent a move to phase 6, by redefining it to include an assessment of the severity of the disease, and not only its geographical spread.

Adding that requirement of severity may sound like common sense. But it is not, because the [severity of a pandemic is unpredictable](#). The flu might fizzle out; or it could go away for months only to come back with a vengeance, creating as much devastation as the 1918 flu outbreak, which caused an estimated 50 to 100 million deaths worldwide.

Moreover, the WHO has pointed out that adding that criterion at a global level would be largely meaningless – what might be deemed a mild disease in a rich country with many doctors, drugs and intensive-care units might be more severe and cause considerable mortality in a poor country with little health infrastructure, and where underlying diseases may worsen outcomes of a flu infection.

So what's the big hang-up with [calling a pandemic a pandemic](#)? Those fretting over the term include news pundits in denial about the scale of the threat, along with politicians and scientists who fear that using the word may induce public panic.

Action, not phases

The importance of the phase 6 designation is overrated. It is not some alert threshold that, when passed, triggers an automatic and unstoppable series of draconian measures. As Chan says, "Level 6 does not mean that we are facing the end of the world."

The World Health Organization's Margaret Chan is under pressure over the pandemic status of swine flu. Credit: WHO

The WHO revised its pandemic preparation guidelines in April to make it clear that the organization's role is limited to the following: defining the extent of the virus's spread; coordinating the international public-health response; selecting the pandemic vaccine strains and recommending when large-scale vaccine production should start; and coordinating the gathering of scientific data on the outbreak.

Individual nations then take responsibility for deciding an appropriate course of action. The United States, for example, plans different responses depending on where a pandemic falls on its hurricane-like scale of severity, ranging from category 1 (denoting case-fatality rates of less than 0.1%) to category 5 (denoting case-fatality rates of 2% or above).

Richard Besser, acting head of the US Centers for Disease Control and Prevention (CDC), said in a media briefing on 28 April that from a US perspective, the WHO phases have very little meaning. "What we do means a lot more than what it is called," he told reporters. That involves "looking at what's going on at the community level and adjusting and adapting our guidance and our actions based on what's taking place on the ground". Besser is essentially saying that for practical purposes the US is acting as if it faces a pandemic threat, and other governments should be displaying similar candour.

Indeed, the WHO's expectations of national response are the same for phases 5 and 6. Both call for "each country to implement actions as called for in their national plans", and to be ready for an "imminent response".

Period of grace

Yet the debate over moving to phase 6 goes on. Chan was obliged to meekly acknowledge concerns about moving too quickly to phase 6 in her address on 18 May to the annual meeting in Geneva, Switzerland, of the World Health Assembly – the WHO's supreme decision-making body.

But she reminded delegates that the move to phase 5 had already activated several preparedness measures, and had helped to put public-health services, labs and industry on alert. She reiterated the definition of a pandemic: "A defining characteristic of a pandemic is the almost-universal vulnerability of the world's population to infection. Not all people become infected, but nearly all people are at risk."

The truth is that this defining characteristic has largely been met. As of 21 May, the WHO had reported some 11,034 lab-confirmed cases and 85 deaths in 41 countries. Moreover, although the official tally of lab-confirmed cases in the United States is 5,710, the CDC points out that the true number is probably well over 100,000.

Now that swine flu is everywhere in the United States, the CDC says that counting confirmed cases has become largely irrelevant. It has switched instead to its traditional surveillance systems for monitoring flu-like symptoms by looking for patterns, clusters and changes in flu activity nationwide. Other countries will surely follow suit as their outbreaks progress. Heavy surveillance teamed with rapid isolation and treatment of individual cases only makes sense at the very earliest stage of an outbreak in a region, when there is a possibility of slowing the initial spread. It becomes irrelevant once the virus is spreading widely within the community, as it is in the United States.

As Chan implied in her address, there are more pressing issues at hand than quibbling over phase definitions, such as helping poorer countries to prepare for the pandemic.

"This virus may have given us a grace period, but we do not know how long this will last," says Chan. "I strongly urge the international community to use this grace period wisely. I strongly urge you to look closely at anything and everything we can do, collectively, to protect developing countries from, once again, bearing the brunt of a global contagion."

This morning, Chan told the World Health Assembly that despite pressure to hold off from phase 6, she would not hesitate to raise the level if needs be. Chan is right - it is time to call a pandemic a pandemic.

The New York Times

Lawrence K. Altman

Is This a Pandemic? Define 'Pandemic'

The New York Times, 8 June 2009, p. D1

<https://www.nytimes.com/2009/06/09/health/09docs.html>

After decades of warnings about the inevitability of another pandemic of influenza, it is astonishing that health officials have failed to make clear to the public, even to many colleagues, what they mean by the word pandemic.

Generations of people have used the term to describe widespread epidemics of influenza, cholera and other diseases. But as the new H1N1 swine influenza virus spreads from continent to continent, it is clear that a useful definition is far more complicated and elusive than officials had thought. And what is at stake is far more than an exercise in semantics. A clear understanding of the term is central to the World Health Organization's six-level staging system for declaring a pandemic, which in turn informs countries when to set their control efforts in motion.

Dictionaries and medical journals offer little guidance. Their definitions can be too vague or too narrow, contradictory and clouded by jargon. "There is a lot of misinformation in the medical literature, and it is really quite hard to figure out what is and what is not a pandemic," said Dr. David M. Morens, an epidemiologist at the National Institute of Allergy and Infectious Diseases who has been studying the history of pandemics. The word implies the rapid spread of an infectious disease to many countries in different regions, hitting each with more or less the same severity. But in fact, severity varies – not all people are infected at the same time, and not every country need be affected.

And there can be many other factors, including the numbers and percentages of people falling ill and dying; a population's vulnerability to the disease, based on previous rates of infection; and the quality of health care facilities and disease monitoring systems. Not least is that scientists do not know precisely how pandemics arise, what fuels them, why they vary in their lethality, why some occur in waves and why they stop.

Health officials have long preached that with influenza, the only sure bet is to expect the unexpected. The new swine influenza virus, which appeared suddenly after years of warning about a potential pandemic of avian influenza, upset the W.H.O.'s assumptions that most people have the same understanding of the word pandemic. For years, the organization's Web site defined an influenza pandemic as causing "[enormous numbers of deaths and illness](#)." But the agency recently pulled the definition, apologizing for causing confusion and anxiety.

One of the biggest problems in public health is communicating risk assessment.

United States and W.H.O. officials say their preparedness plans are intended for governments, not people in the street. Officials bristle at criticism that their messages and plans have led the public to equate the word pandemic with the Spanish influenza of 1918-19, the worst recorded pandemic in history, killing 20 million to 100 million people.

In preparing for the worst, officials have considered milder pandemics, said Dr. Nancy J. Cox, chief of the influenza division at the Centers for Disease Control and Prevention in Atlanta. But Dr. William Schaffner, the chairman of preventive medicine at Vanderbilt University, said that "we, the public health community, deserve to be chided" about the confusion. "We ought to be able to do a better job in communicating in an understandable way," he said in an interview. Scientists like to

assert that theirs is an exact discipline. But like the terms “evidence-based medicine” and “peer review,” pandemic turns out to be another example of imprecise vocabulary that doctors use every day, assuming everyone understands their meaning.

Journals, textbooks and reference works use pandemic in discussing certain diseases, but rarely define the word. For example, the definition section of the Control of Communicable Diseases Manual, a standard reference work, includes “endemic” (said of a disease that is usually present in an area or a population group) and “epidemic” (more cases of an illness than would normally be expected) but not “pandemic.”

The disease manual’s editor, Dr. David L. Heymann, a retired assistant director-general of the W.H.O., said the term had not caused confusion in the past, but assured me in an interview that “pandemic will be defined in the next edition.”

Even the indexes of most major medical textbooks do not list pandemic. One is Harrison’s Principles of Internal Medicine, of which Dr. Anthony S. Fauci, who directs the National Institute of Allergy and Infectious Diseases, is a main editor. “It’s a mistake, and I’m surprised it’s not there because it should have been,” Dr. Fauci said in an interview.

Government agencies do not have official lists of pandemics. Textbooks cite many recent and old ones, including these:

- AIDS. Many experts have called H.I.V. a pandemic. Others disagree, saying the virus is pandemic only in Africa.
- Cholera. Since 1817, most experts agree, the world has had seven pandemics of this bacterial illness, which causes severe diarrhea and dehydration. Acute hemorrhagic conjunctivitis. Beginning in 1969, an enterovirus has caused tens of millions of cases of a highly contagious, acute, painful, but rarely blinding, form of hemorrhagic eye inflammation.
- Dengue. Since World War II, this mosquito-borne viral disease has spread widely in Asia and Latin America.
- Syphilis. A pandemic of the bacterial disease raced through Europe and Asia after Columbus’s return from America and during mass movements of armies in Europe.

Although pandemics have been classically limited to infectious diseases, the term has spread to noninfectious, chronic ones. For example, many health officials now speak of pandemics of obesity and heart disease.

Knowledge about past pandemics is necessarily incomplete; historical accounts cannot make up for the absence of modern disease monitoring and laboratory tests. About 14 pandemics of influenza have been described since the 16th century, with the first indisputable one occurring in 1889.

In 1580, an influenza pandemic swept through Asia into Europe within six weeks, and at least 10 percent of Rome’s 81,000 residents died in the first week, said Dr. Michael T. Osterholm, director of the Center for Infectious Disease Research and Policy at the University of Minnesota. Some Spanish cities were almost totally depopulated.

Dr. Morens, of the infectious diseases institute, said his studies of influenza pandemics left a confusing track record and “are rewiring our brains about thinking about influenza.” “The medical literature will tell you there were three pandemics in the 1830s,” he said – “one from 1830 to 1832, a second in 1833 to 1834 and a third in 1836 to 1837. But I am beginning to think they were all one pandemic.”

Dr. Morens said he was puzzled as to why no influenza pandemics were recorded for nearly 150 years after the one in 1580, although there were some severe localized epidemics. “A period of pandemic stability makes us wonder whether a pandemic comes at any time by chance,” he said, “or whether something about epidemic situations prevents pandemics,” or at least delays them.

The W.H.O.’s staging system has long been part of its plan for an influenza pandemic.

Deep concern about a potential pandemic of the H5N1 avian influenza virus led the organization to convene a large meeting of experts in 2005. Among other things, the experts recommended simplifying the staging system.

A number of doctors ask why health agencies do not declare seasonal influenza a pandemic when it spreads around the world.

But Dr. Osterholm, the Minnesota expert, said that “you can’t use the terminology for just worldwide transmission, because if you did that, you would say every seasonal flu year is a pandemic.” “To me,” he continued, “a pandemic is basically a new or novel agent emerging with worldwide transmission.”

Dr. Keiji Fukuda, an influenza expert who is an assistant director-general at the W.H.O., said in an interview that “as difficult as things are right now,” the problem of defining a pandemic and communicating risk “would be magnitudes worse and more confusing” if the agency had not dealt with AIDS, SARS and avian influenza.

Those experiences prompted new international health regulations and pandemic plans, and allowed critical scientific information to be disseminated quickly, he said.

The process was “painful, sure,” he said. “But you can’t really do anything like this without having some amount of pain.”

Los Angeles Times

Michael Fumento

WHO's flu

Los Angeles Times, 14 June 2009, 12 AM // 9, p. 21.

<https://www.latimes.com/archives/la-xpm-2009-jun-14-oe-fumento14-story.html>

How bizarre! The World Health Organization has declared swine flu a “pandemic,” signaling governments worldwide to launch emergency response plans.

The mildest pandemics of the 20th century killed at least a million people worldwide, according to the WHO’s data, while old-fashioned seasonal flu strikes every nation yearly and kills an estimated 250,000 to 500,000. As of Thursday, when the pandemic was declared, H1N1 swine flu had killed only 144 people total – fewer than succumb daily to seasonal flu annually. And in Mexico, where the outbreak began and where it has been the most severe, cases peaked quickly, in just four weeks.

A pandemic declaration will be costly when we can least afford it and could prompt severe restrictions on human activities (think China). Perhaps most important, such a declaration could render the term “flu pandemic” essentially meaningless – risking lethal public complacency if a bona fide one hits.

So how can the WHO say swine flu qualifies as a pandemic? And why?

The WHO definition for “influenza pandemic” once required “several, simultaneous epidemics worldwide with **enormous numbers of deaths and illness.**” But in 2005, it promulgated a definition that virtually ignores the number of cases and completely ignores deaths. Now it requires “sustained chains of human-to-human transmission leading to community-wide outbreaks” in two parts of the world, with this addition: The cause must be an animal or human-animal flu virus; the latter is known as genetic reassortment.

Thus, under this definition, “community-wide outbreaks” of swine flu in two South American countries and somewhere in China could qualify as a pandemic. No deaths required. And a pure human flu that killed 20 million people would not qualify.

The obvious presumption is that viruses with animal genes pose a greater threat. But that’s “a matter of faith more than science,” says James Chin, a UC Berkeley epidemiologist who was in charge of surveillance and control of communicable diseases at the WHO in the late 1980s.

Indeed, the science indicates the presumption is false. The WHO first warned of an H5N1 avian flu pandemic in 2004, projecting up to 150 million deaths. Yet a 2007 study found H5N1 – though detected in 1959 – was many mutations away from the ability to become readily transmissible among humans.

We’re also repeatedly warned that if H5N1 reassorted with human flu, it would produce a combination with the alleged severity of the bird virus and the infectiousness of the human one. Yet a 2006 Centers for Disease Control and Prevention study found the opposite: that a genetically engineered reassortment given to ferrets – the best animal models for human flu – produced milder and less infectious flu than did pure H5N1. Reassortment didn’t create a “super flu” but rather a 98-pound weakling.

As to human-pig hybrids, a 1976 New Jersey swine flu outbreak in the dead of winter, when flu is most contagious, infected just 230 soldiers, killing one, on a crowded Army base.

At some level, the WHO knows its definition is faulty. The online “WHO Handbook for Journalists” still states: “A pandemic virus can emerge” by adapting “during human infections.” And the WHO has warned that one way avian flu could become pandemic is through a purely human mutation.

But it’s also true that the worst influenza pandemic in history, the Spanish flu of 1918-19, did involve an animal-human hybrid virus; that episode has become a popular obsession. Never mind that “each subsequent novel flu that sweeps through the world has been milder,” Chin observes. “The public health community keeps waiting for the second coming” of Spanish flu, he says.

So, in 2005, the WHO apparently redefined “flu pandemic” to reflect the popular angst as well as its own.

A less generous observation is that the WHO’s “when, not if” avian flu pandemic failed to materialize, and it has now put swine flu in its stead. In her pandemic announcement Thursday, WHO’s director-general, Margaret Chan, declared: “The world can now reap the benefits of investments over the last five years in pandemic preparedness.” Not really. Swine flu, being no more contagious and far milder than seasonal flu, calls for absolutely no actions that wouldn’t apply to seasonal varieties.

“I think they’re going to have to go back to the drawing board,” says Chin of the WHO definition. For now, we’ll pay in told and untold ways because the WHO has cried “havoc” and let slip the dogs of pandemic.

=> the same text

Michael Fumento. WHO created latest pandemic flu outbreak. – Journal & Courier (Lafayette, IN), 18 June 2009, V 91, N 196, p. 6. <https://www.newspapers.com/image/265461953/?terms=enormous%20&match=1>

Michael Fumento. The word 'Pandemic' is losing Meaning. Valley News (West Lebanon, NH), 18 June 2009, V 58, N 10, p. 10.

<https://www.newspapers.com/image/834621693/?terms=%22with%20enormous%20numbers%20of%20deaths%20and%20illness%22&match=1>

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Michael Fumento. WHO declaration of pandemic risky. – The Herald-Sun (Durham, NC), 21 June 2009, p. D6, D8.

<https://www.newspapers.com/image/796059560/?terms=%22with%20enormous%20numbers%20of%20deaths%20and%20illness%22&match=1>

WHO must rewrite its definition of 'pandemic'. – The Press of Atlantic City (Atlantic City, NJ), 21 June 2009, V MMIX, N 173, p. A9.

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=> the similar text, but not the identical one

Michael Fumento. Who's worried about WHO's flu? – Portland Press Herald (Portland, ME), 18 June 2009, V 147, N 313, p. 11.

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**A bad decision.
Declaring pandemic now makes no sense.**

The Marshall News Messenger (Marshall, TX), 20 June 2009, V 132, N 20, p. 4A.

<https://www.newspapers.com/image/335150226/?terms=%22with%20enormous%20numbers%20of%20deaths%20and%20illness%22&match=1>

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(*Michael Fumento is director of the Independent Journalism Project*)



Massachusetts Institute of Technology (MIT)

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Richard C. Larson, Karima R. Nigmatulina

Engineering Responses to Pandemics

Working Paper Series; ESD-WP-2009-14, 14 August 2009

<http://dspace.mit.edu/handle/1721.1/102848>

Engineering the System of Healthcare Delivery

Engineering the System of Healthcare Delivery

William B. Rouse, Denis A. Cortese, editors

Amsterdam, Berlin, Tokyo, Washington, DC., IOS Press, 2010, p. 314

<https://ebooks.iospress.nl/volume/engineering-the-system-of-healthcare-delivery>

2. Background: What is a pandemic?

Influenza pandemics are usually associated with *high morbidity, excess mortality* as well as economic and social disruptions. As defined by the World Health Organization (WHO), influenza pandemics arise when:

1. A “novel” influenza virus, to which the general population has no pre-existing immunological protection, emerge.²
2. The virus infects humans and causes serious illness.
3. It spreads efficiently amongst people with sustained chains of transmission.

Once such an event starts and reaches a certain level of local or regional spread, continued worldwide spread of the virus is considered inevitable especially given the highly interconnected nature of today’s world.

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Government of Canada. H1N1 flu virus Frequently Asked Questions

Public Health Agency of Canada, 25 August 2009, p. 13.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiY3Zivgff_AhVO-2EKHbdnDsYQFnoECA0QAQ&url=https%3A%2F%2Fwww.kpu.ca%2Fsites%2Fdefault%2Ffiles%2FOccupational%2520Health%2520%2526%2520Safety%2FH1N1_FAQ_-_General13655.pdf&usg=AOvVaw1O806mj5beR8aKHw3G-XVf&opi=89978449

General Information

H1N1 Flu Virus has been reported around the world, and the World Health Organization (WHO) has declared it a pandemic influenza virus.

Governments around the world and the World Health Organization are engaged to investigate and address this situation.

The Public Health Agency of Canada continues to work with federal, provincial and international governments to address this situation, and will share more information with Canadians as it becomes available.

...

International Actions

Q1. The World Health Organization (WHO) has raised the pandemic alert level to Phase Six. What are these phases?

WHO currently identifies six stages of Pandemic Preparedness and Response.

Phase 1: Influenza viruses are circulating in animals, especially birds. No reports of animal viruses infecting humans.

Phase 2: Human infection by an animal influenza virus. Potential pandemic threat.

Phase 3: An animal or animal-human influenza virus has caused limited disease in people. Isolated human to human transmission may occur – but not widespread.

Phase 4: Verified human to human transmission of an animal or human-animal virus causing widespread or “community-level” outbreaks. Risk of pandemic is considered much higher but not a foregone conclusion.

Phase 5: Human to human spread of the virus is confirmed in at least two countries in one WHO region. It is likely that a pandemic is imminent. Time to finalize organization, communication, and implementation of planned mitigation strategies is short.

Phase 6: The Pandemic Phase. Community outbreaks in at least one country from a second WHO region – indicating that a global pandemic is underway. The Director-General of the WHO makes the decision about an elevation of pandemic phases based on reports from countries of the impact of disease.

...

Q4. Are all pandemics severe?

No. An influenza pandemic may be mild, moderate or severe. An influenza pandemic means the virus is spread easily between humans, and affects a wide geographic area. An influenza pandemic **does not necessarily cause more severe illness than seasonal influenza.** (p. 13)

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Profile

Neue Grippe: Was ist eine Pandemie?

Kurz bevor die WHO die höchste Pandemie-Warnstufe ausrief, änderte sie deren Definition.

Profil (Wien), 2009, Bd. 40, August, p. 86

https://www.google.com.my/books/edition/Profil/_EZOAAIAAJ?hl=en&gbpv=1&bsq=Kurz+bevor+die+WHO+die+h%C3%B6chste+Pandemie&dq=Kurz+bevor+die+WHO+die+h%C3%B6chste+Pandemie&printsec=frontcover

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Bis Anfang Mai dieses Jahres fand sich auf der Website der Weltgesundheitsorganisation (WHO) die Erklärung, dass sich eine Influenza-Pandemie durch eine „enorme Anzahl von Todesfällen und Krankheiten“ auszeichnet. Als WHO-Generaldirektorin Margaret Chan dann am 11. Juni die höchste Pandemie-Warnstufe ausrief, war dieser Passus bereits gestrichen worden. Chan begründete die Maßnahme nur noch mit der geografischen Bedeutung des Wortes: Eine Pandemie ist demnach eine Infektionskrankheit, die sich über eine große Region ausbreitet. Damit erst passte die neue H1N1-Influenza ins Schema, da sie bislang eher die Charakteristiken einer milden Grippewelle aufweist.

Die rein geografische Argumentation stößt aber auf Kritik. „Wenn das so ist, dann müsste man jedes Jahr bei der ganz normalen Influenza auch die Pandemie ausrufen“, erklärte Michael Osterholm, Infektionsexperte der Universität Minnesota. Und Tom Jefferson, Influenza-Experte der unabhängigen Cochrane Collaboration, tippte auf finanzielle Hintergründe der WHO-Aktion. „Um die Pandemie ist im Lauf der Jahre eine richtige Geldmaschine aufgebaut worden, und diese wurde nun in Gang gesetzt.“

Auf Nachfrage bei der WHO entschuldigte sich deren Sprecherin Natalie Boudou für die mit der Definitionsänderung ausgelöste Konfusion. „Das wurde bereits vor längerer Zeit veröffentlicht und könnte die Menschen verängstigen.“ Die WHO wolle aber nur zur Wachsamkeit aufrufen.

Bis Anfang Mai dieses Jahres fand sich auf der Website der Weltgesundheitsorganisation (WHO) die Erklärung, dass sich eine Influenza-Pandemie durch eine **"enorme Anzahl von Todesfällen und Krankheiten"** auszeichnet. Als WHO-Generaldirektorin Margaret Chan dann am 11. Juni die höchste Pandemie-Warnstufe ausrief, war dieser Passus bereits gestrichen worden. Chan begründete die Maßnahme nur noch mit der geografischen Bedeutung des Wortes: Eine Pandemie ist demnach eine Infektionskrankheit, die sich über eine große Region ausbreitet. Damit erst passte die neue H1N1-Influenza ins Schema, da sie bislang eher die Charakteristiken einer milden Grippewelle aufweist.

Die rein geografische Argumentation stößt aber auf Kritik. "Wenn das so ist, dann müsste man jedes Jahr bei der ganz normalen Influenza auch die Pandemie ausrufen", erklärte Michael Osterholm, Infektionsexperte der Universität Minnesota. Und Tom Jefferson, Influenza-Experte der unabhängigen Cochrane Collaboration, tippte auf finanzielle Hintergründe der WHO-Aktion. "Um die Pandemie ist im Lauf der Jahre eine richtige Geldmaschine aufgebaut worden, und diese wurde nun in Gang gesetzt."

Auf Nachfrage bei der WHO entschuldigte sich deren Sprecherin Natalie Boudou für die mit der Definitionsänderung ausgelöste Konfusion. "Das wurde bereits vor längerer Zeit veröffentlicht und könnte die Menschen verängstigen." Die WHO wolle aber nur zur Wachsamkeit aufrufen.

Peter Doshi

Calibrated response to emerging infections

BMJ, 3 September 2009; 9; 339(sep 03 2):b3471-b3471.

http://www.bmj.com/cgi/content/full/339/sep03_2/b3471

WHO has revised its definition of pandemic flu in response to current experience with A/H1N1. Peter Doshi argues that our plans for pandemics need to take into account more than the worst case scenarios.

The current flu pandemic raises a public health policy question that could have been asked after the emergence of severe acute respiratory syndrome (SARS): what is the proper response to clinically mild or epidemiologically limited (small number) outbreaks caused by new viruses? Over the past four years, pandemic preparations have focused on responding to worst case scenarios. As a result, officials responded to the H1N1 outbreak as an unfolding disaster. Measures were taken that in hindsight may be seen as alarmist, overly restrictive, or even unjustified. Assumptions about the nature of emerging infections along with advanced laboratory surveillance have changed the way we understand epidemics and we need a new framework for thinking about epidemic disease.

Predictions that missed the mark

Before the arrival of novel A/H1N1 virus, pandemics were said to occur when a new subtype of influenza virus to which humans have no immunity enters the population, begins spreading widely, and causes severe illness.^{1,2} Reference was often made to the catastrophic pandemic of 1918 and the ongoing threat of highly pathogenic avian influenza H5N1 that has killed over half of the 456 people with recorded infection since 1997. Without proper preparation, “The loss of human life even in a mild pandemic will be devastating, and the cost of a world economy in shambles for several years can only be imagined,” one highly cited article concluded in 2005.³ The large sums of public money spent on pandemic preparedness (over \$7bn (£4bn; €5bn) in the US) underlined the seriousness of the threat, and often repeated phrases such as “not a question of IF a pandemic will happen, but WHEN”⁴ characterised the next flu pandemic as a high probability, high consequence event.

But the 2009 pandemic, taken as a whole, bears little resemblance to the forecasted pandemic. Pandemic A/H1N1 virus is not a new subtype but the same subtype as seasonal A/H1N1 that has been circulating since 1977. Furthermore, a substantial portion of the population may have immunity. The US Centers for Disease Control and Prevention (CDC) found that 33% of those aged over 60 had cross reactive antibody to novel A/H1N1,⁵ which may explain why cases have been rare in elderly people.

There is also far less certainty today regarding the severity of the threat of pandemic flu. Experts are unsure that the 2009 pandemic – which the World Health Organization presently characterises as moderate⁶ – will be any worse than seasonal flu.^{7,8,9} Since the emergence of novel A/H1N1, descriptions of pandemic flu (both its causes and its effect) have changed to such a degree that the difference between seasonal flu and pandemic flu is now unclear (table ↓).¹⁰ WHO, for example, for years defined pandemics as outbreaks causing “enormous numbers of deaths and illness”,¹⁰ but in early May, removed this phrase from the definition.¹¹

Changing views of pandemic flu, before and after emergence of influenza A/H1N1 virus

Aspect	Before A/H1N1	Since A/H1N1
One line summary	WHO 2003-9: "An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide with enormous numbers of deaths and illness". ¹⁰	WHO: "An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity". ¹⁰
Virus and immunity	WHO 2005: "Most people will have no immunity to the pandemic virus". ¹	WHO: "The vulnerability of a population to a pandemic virus is related in part to the level of pre-existing immunity to the virus". ¹²
	US CDC 1997: "When antigenic shift occurs, the population does not have antibody protection against the virus" ¹³	US CDC: "Cross-reactive antibody [to A/H1N1] was detected in 6%-9% of those aged 18-64 years and in 33% of those aged >60 years". ⁵
Impact (health, social, economic)	WHO 2005: "Large numbers of deaths will occur . . . WHO has used a relatively conservative estimate—from 2 million to 7.4 million deaths . . . Economic and social disruption will be great" ¹	WHO: "H5N1 has conditioned the public to equate an influenza pandemic with very severe disease and high mortality. Such a disease pattern is by no means inevitable during a pandemic. On the contrary, it is exceptional". ¹⁴
	CDC 1997: "The hallmark of pandemic influenza is excess mortality" ¹³	CDC: "There are some pandemics that look very much like a bad flu season" ⁸
	Canada 2006: "An influenza pandemic results if many people around the world become ill and die from such a [new form of influenza] virus" ¹⁵	Canada: "An influenza pandemic does not necessarily cause more severe illness than seasonal influenza" ⁹

On 29 April 2009, one week after news of the outbreak first surfaced, WHO declared a phase 5 pandemic alert (the highest threat level short of global pandemic), urging all countries to "immediately activate their pandemic preparedness plans".¹⁶ Epidemiological information at this time was mixed, suggesting a severe disease in Mexico but mild everywhere else. Actions were thus taken in an environment of high public attention and low scientific certainty.^{17,18} Some countries erected port of entry quarantines. Others advised against non-essential travel to affected areas. Some closed schools and businesses. Many held daily press briefings. The wisdom of many of these actions, particularly in response to what has largely been a clinically mild illness, will undoubtedly be debated in the future. What these actions more clearly show, however, is that the public health response to, as well as impact and social experience of a pandemic, is heavily influenced by longstanding planning assumptions about the nature of pandemics as disaster scenarios.

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Forbes

Michael Fumento

The Pandemic Is Political

Forbes, 16 October 2009, 7:15 pm EDT

<https://www.forbes.com/2009/10/16/swine-flu-world-health-organization-pandemic-opinions-contributors-michael-fumento.html?sh=474767ae6899>

As evidence continues to mount that swine flu is more of a piglet than a raging razorback, why isn't curiosity mounting as to why the World Health Organization declared it a pandemic? And definitions aside, why does the agency continue to insist we're going to get hammered? The answers have far less to do with world health than with redistribution of world wealth.

Medically, the pandemic moniker is unjustifiable. When the sacrosanct World Health Organization (WHO) made its official declaration in June, we were 11 weeks into the outbreak, and swine flu had only killed 144 people worldwide--the same number who die of seasonal flu worldwide every few hours. The mildest pandemics of the 20th century killed at least a million people worldwide. And even after six months, swine flu has killed about as many people as the seasonal flu does every six days.

So how could WHO make such an outrageous claim? Simple. It rewrote the definition of "pandemic."

A previous [official definition](#) (and widely used unofficial one) required "simultaneous epidemics worldwide with [enormous numbers of deaths and illness](#)." Severity – that is, the number – is crucial, because seasonal flu *always* causes worldwide simultaneous epidemics. But one promulgated in April just days before the announcement of the swine flu outbreak simply [eliminated](#) severity as a factor.

That's also how we can have a "pandemic" when six months of epidemiological data show swine flu to be far milder than the seasonal variety. New York City statistics show it to be perhaps a 10th as lethal. In Australia and New Zealand, flu season has ended, and almost all cases have been swine flu. Yet even without a vaccine, these countries are reporting fewer flu deaths than normal. (In New Zealand, that's just 18 confirmed deaths compared with 400 normally.) Swine flu is causing negative deaths! The best explanation is that infection with the milder strain (swine flu) is inoculating against the more severe strain (seasonal flu) it has displaced.

This all makes sense once you realize that swine flu isn't some sort of alien from outer space as we've been led to believe, but rather "the same subtype as seasonal A/H1N1 that has been circulating since 1977," as the BMJ (formerly the British Medical Journal) observes. It's "something our immune systems have seen before," echoes Peter Palese of New York's Mount Sinai School of Medicine.

The older you are, the more you've been exposed and the higher your immunity level – hence the need to give two swine flu vaccinations to those under age 10.

Nevertheless, because WHO dubbed this a "pandemic," vaccination plans, emergency response measures and frightening predictions have been based on comparisons with true pandemics that by definition were especially severe. That includes the August [report](#) from the [President's Council of Advisors on Science and Technology](#) with its "plausible scenario" of ["30,000 - 90,000 deaths"](#) peaking in "mid-October."

Check your calendar. So, then, why did WHO do it?

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Майкл Фументо

Пандемия политическая

3rm.info / Forbes, 9 ноября 2009

перевод с английского

Fumento M. The Pandemic Is Political. – Forbes, 16 October 2009.

<https://3rm.info/main/622-forbes-pandemiya-politicheskaya.html>

По мере появления доказательств того, что свиной грипп скорее Пятачок, чем клыкастый монстр, хочется поинтересоваться: зачем Всемирная организация здравоохранения объявила пандемию? Почему продолжает настаивать на том, что нам крышка? Ответы, к сожалению, имеют значительно меньше общего с миром здравоохранения, нежели с перераспределением мировых капиталов. С точки зрения медицины пандемии сейчас нет. Когда в июне Всемирная организация здравоохранения (ВОЗ) официально объявила пандемию, прошло 11 недель с начала вспышки, а свиной грипп убил 144 человека.

Именно столько человек умирает от сезонного гриппа во всем мире каждые несколько часов. При наиболее легких пандемиях XX столетия погибли как минимум миллион человек. И даже через 6 месяцев свиной грипп убил приблизительно столько же людей, сколько сезонный грипп уничтожает за каждые шесть дней.

Как тогда ВОЗ могла сделать такое возмутительное заявление? А просто. Она переписала определение «пандемии». Предыдущее официальное определение (широко распространенное неофициально) предполагало «одновременную эпидемию по всему миру **с огромным количеством смертей и болезней**».

Серьезность – то есть, цифры – важна, поскольку сезонный грипп всегда вызывает во всем мире одновременные эпидемии. Но из определения, обнародованного в апреле за несколько дней до объявления про вспышку свиного гриппа, просто вычеркнута серьезность как фактор. Именно потому мы можем иметь «пандемию», когда эпидемиологические данные за 6 месяцев показывают, что свиной грипп будет гораздо мягче, чем сезонный штамм.

Статистические данные из Нью-Йорка показывают, что его показатель смертность может составлять - 10. В Австралии и Новой Зеландии сезон гриппа завершился, и почти во всех случаях диагнозом был свиной грипп. Но даже без вакцинирования эти страны сообщают про меньшее количество смертей, чем обычно. (В Новой Зеландии подтверждено 18 случаев смерти по сравнению с обычными 400).

Тем не менее, поскольку ВОЗ объявила «пандемию», планы вакцинации, меры реагирования на чрезвычайные ситуации и запугивания отталкиваются от сравнения с настоящими пандемиями, которые были особо тяжелыми по определению. К ним принадлежит и августовский доклад Совета по вопросам науки и техники Президента США с ее «вероятным сценарием» с «30000 – 90000 смертей» и пиком в «середине октября».

Но на календаре уже ноябрь... Так зачем ВОЗ это делает?

...

Майкл Fumento - сотрудник проекта в области некоммерческой независимой журналистики

Stuart Paterson

WHO pandemic definition too broad, doctor contends

Infectious disease specialist suggests in article that
World Health Organization's loose definition could lead to false alarms

Globe and Mail, 2 November 2009, 10:39AM EST

<https://web.archive.org/web/20091106131943/http://www.theglobeandmail.com/life/health/h1n1-swine-flu/who-pandemic-definition-too-broad-doctor-contends/article1348100/>

The World Health Organization's definition of what constitutes a pandemic is too broad, according to an article published this week.

Peter Gross, infectious disease specialist with the Hackensack University Medical Center in New Jersey, has penned an editorial for the British Medical Journal's Clinical Evidence in which he suggests that the WHO's loose definition could lead to false alarms.

The WHO changed their definition last year, Dr. Gross said. Previously, a “shift” in the virus would have to occur, meaning a new subtype of the virus would have to appear in order for a pandemic to be declared.

A subtype is represented in the H and N numbers of a flu virus' name, such as H1N1. Another example is avian flu, which is categorized as H5N1 or, technically, as Influenza A/H5N1.

Now, with their recent change, Dr. Gross said the WHO has made the definition too vague. “They said a new animal or human-animal strain could qualify as a pandemic strain. That's too non-specific.” He said neither shifts nor drifts, which are subtle changes in the virus' makeup, are mentioned specifically in the guidelines for declaring a pandemic.

As of this year, the WHO defines a pandemic as occurring “when an animal influenza virus to which most humans have no immunity acquires the ability to cause sustained chains of human-to-human transmission leading to community-wide outbreaks. Such a virus has the potential to spread worldwide, causing a pandemic.”

Dr. Gross says the new definition could lead to false alarms and that “any minor change, any minor drift could be considered a pandemic.”

He also pointed out that, even in a medical dictionary, the definitions for the terms “pandemic” and “epidemic” are not clear, with no guidelines set on the number of people who need to be affected to reach either status, and no specific mortality rate.

In their 2009 Pandemic Influenza Preparedness and Response document, the WHO defined a pandemic as simply “an epidemic on a global scale.”

Dr. Gross said, “H1N1 has been around for most of this century, except for 20 years mid-century, from 1957 to 1976. Nobody knows where it went, but then it re-appeared in '76.”

He said that since 1977, H1N1 has been included in seasonal flu vaccines, along with H3N2.

However, Dr. Gross said the current strain of H1N1 has undergone a significant drift in its makeup, thereby making humans less resistant to it.

“A seasonal flu causes about 36,000 deaths,” he said, referring to statistics in the United States. “The difference with what's going on right now is we have more morbidity and mortality among young children and young adults. Usually, it's the other end of the age-spectrum that's affected.”

The WHO pandemic document includes statistics for the three major pandemics of the 20th century. The worst was the Spanish Flu of 1918-1919, which also targeted young adults and killed 2 to 3 per cent of those who contracted it, worldwide.

“Influenza is different from most other human viruses,” he said. “When you get the measles vaccine, that lasts for a lifetime because the virus is genetically stable.” Influenza, on the other hand, is not as stable because its genetic makeup is split into pieces. If one strain meets another, the pieces mix together. “When it comes out, who knows what it's going to look like?”

“We just need a better definition of all of this,” Dr. Gross said. “It's really kind of amazing after all these years that it's not clearer.”

Information

Louise Voller, Kristian Villesen

Mystisk ændring af WHO's definition af en pandemi

Information, 16. november 2009

https://www.information.dk/udland/2009/11/mystisk-aendring-whos-definition-pandemi?lst_cntrb

WHO har pludselig ændret definitionen på en pandemi på sin hjemmeside. Nu kan stort alle influenzaer kaldes for pandemier, mener kritikere. Dermed vil medicinalindustrien også fremover kunne tjene milliarder på vaccine til relativt ufarlige sygdomme

På WHO's hjemmeside er definitionen af en pandemi blevet ændret. I maj var det et krav, at en influenza skulle forsage et 'enormt antal af døde eller syge', før den kunne betegnes som en pandemi. Men det er ikke længere en del af definitionen. I dag er disse linjerne klippet ud, og det er betænkeligt, mener flere forskere:

»WHO forudsagde svineinfluenza i 2005, men det var først, da de ændrede definitionen for en pandemi i 2009, at de fik ret,« siger epidemiolog Tom Jefferson, der har arbejdet i Rom for det uafhængige forskningsinstitut, Cochrane, i 15 år.

Han finder det mærkværdigt, at netop de linjer er klippet ud, fordi svineinfluenzaen foreløbig kun har kostet 6.071 mennesker livet i modsætning til den almindelige influenza, der ifølge WHO hvert år koster op mod 500.000 mennesker livet.

»Vi er nødt til at vide, hvorfor definitionen blev ændret? Hvem, der ændrede den og hvornår? Efter min mening bør det hele undersøges af et uafhængigt værn,« siger Tom Jefferson.

Forsker på Massachusetts Institute of Technology (MIT) Peter Doshi, kritiserede for nylig definitionsændringen i en analyse i det britiske lægetidsskrift, British Medical Journal:

»Siden H1N1 opstod har beskrivelsen af årsager og konsekvenser ved en pandemi ændret sig i et omfang, hvor forskellen mellem almindelig influenza og pandemisk influenza er usikker«, lyder hans kritik.

Skal følge WHO

Tidligere speciallæge i arbejds- og samfundsmedicin på bl.a. Aarhus Universitet, Mauri Johansson, er enig:

»Begrebet er udvandet. Rigtig mange influenzaer vil fremover kunne betages som pandemier, og beslutningen ligger alene hos WHO,« siger Mauri Johansson, og peger på konsekvenserne:

»Alle medlemslande er forpligtede til at følge anbefalingerne fra WHO - i Danmark er vi tilmed forpligtet til at købe vacciner imod influenzaen, fordi vi lige som mange andre lande har lavet en kontrakt med en virksomhed, og den bliver udløst, hvis WHO erklærer pandemi.«

Information beskriver i dag, hvordan flere af WHO's eksperter er betalt af medicinalindustrien - og hvordan beslutningen om at gøre H1N1 til en pandemi har udløst vaccineordrer hos medicinalindustrien for op imod 55 milliarder kroner.

Den nye definition bør føre til en ændring i beredskabet, mener Peter Doshi: »Jeg mener ikke, at det giver nogen mening at have et pandemiberedskab, der er designet til en nødsituation, hvis den sygdom, der udløser nødberedskabet, ikke er mere alvorlig end det gennemsnitligt årlige sygdomsniveau. At kalde noget for en pandemi afføder alvorlige reaktioner i det offentlige sundhedsvæsen, som igen får alvorlige sociale, politiske og økonomisk konsekvenser,« siger Peter Doshi.

Forskningsleder Peter A Gross fra Hackensack University Medical Center er enig i, at WHO's ændrede definition er problematisk:

»I fremtiden ville det klæde WHO at være klarere i deres definition af en influenzapandemi. Det er uklart, om dødeligheden vil stige som følge af H1N1, men uanset hvad vil det stresse sundhedssystemet,« påpeger Peter A. Gross.

WHO

Hos WHO mener talsmand for H1N1's globale alarmberedskab, Gregory Härtl ikke, at der er problemer med definitionen af en epidemi:

- Hvorfor er '**enormt antal af døde og syge**' ikke længere en del af WHO's definition på en pandemi?

»Den formulering har brugt siden 2004, hvor den blev lagt på en hjemmeside. Men den har aldrig været den officielle definition. Der skal man i stedet se på The Pandemic Preparedness Guidance«.

- Definitionen står på WHO's hjemmeside under overskriften: Hvad er en influenzapandemi? Men det er ikke en definition?

»Jeg ved godt, at man skulle tro, at hjemmesiden er officiel, men det er den altså ikke. Sætningen '**enorme antal af døde og syge til følge**' har aldrig været i The Pandemic Preparedness Guidance«.

Det har ikke været muligt at finde ud af præcis, hvornår ændringen af definitionen på WHO's hjemmeside blev gennemført.

Information

Louise Voller, Kristian Villesen

A mystisk change in the WHO's definition of a pandemic

Google translation from Dutch into English

Information, 16 November 2009

https://www.information.dk/udland/2009/11/mystisk-aendring-whos-definition-pandemi?lst_cntrb

The WHO has suddenly changed the definition of a pandemic on its website. Now almost all influenzas can be called pandemics, say critics. In this way, the pharmaceutical industry will continue to be able to earn billions from vaccines for relatively harmless diseases

On the WHO website, the definition of a pandemic has been changed. In May, it was a requirement that a flu had to cause an '**enormous number of dead or sick**' before it could be described as a pandemic. But that is no longer part of the definition. Today, these lines have been cut out, and this is worrisome, according to several researchers:

"The WHO predicted swine flu in 2005, but it wasn't until they changed the definition for a pandemic in 2009 that they got it right," says epidemiologist Tom Jefferson, who has worked in Rome for the independent research institute, Cochrane, for 15 years.

He finds it strange that precisely those lines have been cut out, because the swine flu has so far only claimed the lives of 6,071 people, in contrast to the common flu, which, according to the WHO, kills up to 500,000 people every year.

"We need to know why the definition was changed? Who changed it and when? In my opinion, the whole thing should be investigated by an independent body," says Tom Jefferson.

Massachusetts Institute of Technology (MIT) researcher Peter Doshi recently criticized the definition change in an analysis in the British Medical Journal:

"Since H1N1 emerged, the description of the causes and consequences of a pandemic has changed to an extent where the difference between ordinary flu and pandemic flu is uncertain," reads his criticism.

Must follow WHO

Former specialist in occupational and social medicine at, among others Aarhus University, Mauri Johansson, agrees:

"The concept is watered down. A great many influenzas will in future be considered pandemics, and the decision rests with the WHO alone," says Mauri Johansson, and points to the consequences:

"All member states are obliged to follow the recommendations from the WHO - in Denmark we are also obliged to buy vaccines against the flu because, like many other countries, we have made a contract with a company, and it is triggered if the WHO declares a pandemic."

Information today describes how several of the WHO's experts have been paid by the pharmaceutical industry - and how the decision to make H1N1 a pandemic has triggered vaccine orders from the pharmaceutical industry for up to DKK 55 billion.

The new definition should lead to a change in preparedness, Peter Doshi believes: "I don't think it makes sense to have a pandemic preparedness designed for an emergency if the disease that triggers the emergency is not more serious than the average annual level of disease. Calling something a pandemic generates serious reactions in the public health system, which in turn have serious social, political and economic consequences," says Peter Doshi.

Research leader Peter A Gross from Hackensack University Medical Center agrees that the WHO's changed definition is problematic:

"In the future, it would behoove the WHO to be clearer in their definition of an influenza pandemic. It is unclear whether mortality will increase as a result of H1N1, but regardless, it will stress the health system," points out Peter A. Gross.

WHO

At the WHO, spokesman for H1N1's global emergency preparedness, Gregory Härtl does not believe that there are problems with the definition of an epidemic:

- Why is '[huge number of dead and sick](#)' no longer part of the WHO's definition of a pandemic?

"That wording has been used since 2004, when it was put on a website. But it has never been the official definition. Instead, you should look at The Pandemic Preparedness Guidance'.

- The definition is on the WHO website under the heading: What is an influenza pandemic? But that's not a definition?

"I know that you would think that the website is official, but it is not. The phrase '[enormous number of dead and sick as a result](#)' has never been in The Pandemic Preparedness Guidance'.

It has not been possible to find out exactly when the change to the definition on the WHO website was implemented.

Information

Louise Voller, Kristian Villesen

Загадочное изменение в определении пандемии проведенное ВОЗ

Google перевод с голландского на русский

Information, 16 ноября 2009

https://www.information.dk/udland/2009/11/mystisk-aendring-whos-definition-pandemi?lst_cntrb

ВОЗ неожиданно изменила определение пандемии на своем сайте. Сейчас почти все виды гриппа можно назвать пандемиями, говорят критики. Таким образом, фармацевтическая промышленность по-прежнему сможет зарабатывать миллиарды на вакцинах от относительно безвредных болезней.

На сайте ВОЗ изменено определение пандемии. В мае требовалось, чтобы грипп вызвал «огромное количество умерших или заболевших», прежде чем его можно было назвать пандемией. Но это больше не является частью определения. Сегодня эти строки были вырезаны, и это вызывает беспокойство, по мнению нескольких исследователей:

«ВОЗ предсказала свиной грипп в 2005 году, но только когда они изменили определение пандемии в 2009 году, они поняли это правильно», — говорит эпидемиолог Том Джефферсон, который работал в Риме в независимом исследовательском институте Cochrane, 15 лет.

Ему кажется странным, что вырезаны именно эти строки, потому что свиной грипп унес пока только 6071 жизнь, в отличие от обычного гриппа, который, по данным ВОЗ, ежегодно уносит жизни до 500 000 человек.

«Нам нужно знать, почему определение было изменено? Кто изменил его и когда? На мой взгляд, все это должно быть расследовано независимым органом», — говорит Том Джефферсон.

Исследователь из Массачусетского технологического института (MIT) Питер Доши недавно раскритиковал изменение определения в анализе, опубликованном в British Medical Journal:

«С момента появления H1N1 описание причин и последствий пандемии изменилось до такой степени, что разница между обычным гриппом и пандемическим гриппом неопределенна», — говорится в его критике.

Дания обязана следовать решениям ВОЗ

Бывший специалист по профессиональной и социальной медицине, в том числе Орхусский университет, Маури Йоханссон, соглашается:

«Концепция размыта. Многие виды гриппа в будущем будут считаться пандемиями, и решение остается за ВОЗ», — говорит Маури Йоханссон и указывает на последствия:

«Все государства-члены обязаны следовать рекомендациям ВОЗ – в Дании мы также обязаны покупать вакцины против гриппа, потому что, как и во многих других странах, мы заключили контракт с компанией, и он срабатывает, если ВОЗ объявляет пандемию».

Сегодняшняя информация описывает, как фармацевтическая промышленность заплатила нескольким экспертам ВОЗ, и как решение сделать H1N1 пандемией привело к тому, что фармацевтическая промышленность заказала вакцины на сумму до 55 миллиардов датских крон.

Новое определение должно привести к изменению готовности, считает Питер Доши: «Я не думаю, что имеет смысл иметь готовность к пандемии, предназначенную для чрезвычайной ситуации, если болезнь, вызвавшая чрезвычайную ситуацию, не более серьезна, чем среднегодовой уровень заболеваемости. Болезнь. Называние чего-то пандемией вызывает серьезную реакцию в системе общественного здравоохранения, что, в свою очередь, имеет серьезные социальные, политические и экономические последствия», – говорит Питер Доши.

Руководитель исследования Питер А. Гросс из Медицинского центра Университета Хакенсак согласен с тем, что измененное определение ВОЗ проблематично:

«В будущем ВОЗ надлежит быть более четким в своем определении пандемии гриппа. Не ясно, увеличится ли уровень смертности в результате H1N1, но, тем не менее, это вызовет нагрузку на систему здравоохранения», — отмечает Питер А. Гросс.

ВОЗ

Представитель ВОЗ по вопросам глобальной готовности к чрезвычайным ситуациям в связи с H1N1 Грегори Хартль не считает, что существуют проблемы с определением эпидемии:

- Почему «огромное количество умерших и больных» больше не входит в определение пандемии ВОЗ?

«Эта формулировка используется с 2004 года, когда она была размещена на сайте. Но это никогда не было официальным определением. Вместо этого вам следует ознакомиться с Руководством по обеспечению готовности к пандемии».

- Определение есть на сайте ВОЗ под заголовком: Что такое пандемия гриппа? Но это не определение?

«Я знаю, что вы думаете, что сайт официальный, но это не так. Фразы «огромное количество умерших и больных в результате» никогда не было в Руководстве по обеспечению готовности к пандемии.

Когда именно было внесено изменение в определение на веб-сайте ВОЗ, выяснить не удалось.



WHO Key Messages – Conflict of Interest Issues

Geneva, WHO, 11 January 2010

https://web.archive.org/web/20100118104158/http://www.wpro.who.int/vietnam/media_centre/press_releases/h1n1_8jan2010.htm

Topics

- Reaction to criticism
- Council of Europe motion to discuss "Faked pandemics: a threat for health"
- **Definition of pandemic**
- Influence from pharmaceutical industry
- Why WHO recommends vaccination
- Emergency Committee
- Strategic Advisory Group of Experts (SAGE)
- Exaggerated pandemic?

...

Definition of pandemic

Key messages:

WHO **did not change the definition of pandemic** in the course of this outbreak. A pandemic is declared when there have been verified community-level outbreaks of a new influenza virus, passing from human-to-human, in two or more countries in more than one WHO region.

WHO pandemic preparedness guidelines and other background information is available here: <http://www.who.int/csr/disease/influenza/pipguidance2009/en/index.html>

WHO's pandemic preparedness guidelines were developed in consultation with Member States and pandemic influenza experts over the course of several years. The 2005 pandemic preparedness guidelines were revised over a two year period of consultation and were finalized in February 2009. These were published in April, just as it appeared we were about to face a new pandemic.

Some of the confusion may stem from the fact that there was a document on WHO's *website for some months that said a pandemic would include* "enormous amounts of cases and deaths". This was removed when it was brought to our attention. This information was never part of the formal definition of a pandemic and was never part of documents sent to Member States for their preparedness work. We regret the confusion it has caused.

WHO has consistently assessed the impact of the current influenza pandemic as moderate, reminding the medical community, public, and media that the overwhelming majority of patients experience mild influenza-like illness and recover fully within a week, even without any form of medical treatment.

СТАТЬЯ ПО ВАМ ПЛАЧЕТ!

Как ВОЗ инсценировала пандемию «свиного гриппа»

Перевод статьи

Michael Fumento. Why The WHO Faked A Pandemic. – Forbes, 5 February 2010

<https://redko-da-metko.ru/2021/05/09/kak-voz-inszenirovala-pandemiu-svinogo-grippa/>

Всемирная Организация Здравоохранения внезапно перестала кричать: «небо падает!» – как кудахчущая курица. Причина: обвинения в том, что ведомство намеренно разжигало истерию вокруг свиного гриппа. [в 2009-2010 гг]

«Мир переживает настоящую пандемию. Описание его как подделки является неправильным и безответственным», – говорится в заявлении агентства на его веб-сайте.

Представитель ВОЗ отказался уточнить, кто или что дал это «описание», но главного обвинителя трудно игнорировать.

...

Но как организация могла объявить пандемию, когда ее собственное официальное определение требовало «одновременных эпидемий во всем мире с огромным числом смертей и болезней»

Серьезность – то есть количество смертей – имеет решающее значение, потому что каждый год грипп вызывает глобальное распространение болезни

Легко. В мае, в том, что она признала, было прямым ответом на вспышку свиного гриппа месяцем ранее, ВОЗ обнародовала новое определение, соответствующее свиному гриппу, которое просто устранило тяжесть как фактор. Теперь у вас может быть пандемия с нулевой смертностью. Как так?

В середине января на виртуальной конференции ВОЗ по свиному гриппу глава Кэйдзи Фукуда заявил: «изменила ли ВОЗ свое определение пандемии?»

Ответ отрицательный: кто не изменил своего определения. Две недели спустя на конференции ПАСЕ он настаивал: «наличие тяжелых смертей никогда не было частью определения ВОЗ.

Они сделали это, но зачем?

Агентство теряло доверие из-за отказа птичьего гриппа H5N1 (по прогнозам) перейти в пандемию и убить до 150 миллионов человек во всем мире, как и предсказывал его «царь гриппа» [глава ВОЗ] в 2005 году.

Страны всего мира прислушались к этим предостережениям и потратили огромные суммы на разработку вакцин и других препаратов. Поэтому, когда свиным гриппом удобно было воспользоваться.

ВОЗ по существу вычеркнула «птичий», вставила «свиной», и генеральный директор ВОЗ Маргарет Чен высокомерно похвасталась: «мир теперь может пожинать плоды инвестиций за последние пять лет в обеспечение готовности к пандемии.»

...

Майкл Фументо. 2010 год. Журнал Forbes



COUNCIL OF EUROPE

Dr. Tom Jefferson

Influenza

Ppt Presentation, presumably done on ~ 22 March 2010 (?)

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwip1Z7o8-n_AhXuS2wGHQXAAHk4KBAWegQIFxAB&url=http%3A%2F%2Fassembly.coe.int%2FCommitteeDocs%2F2010%2FPresentation_Jefferson.pdf&usg=AOvVaw3dgMfr1-jzEnjgC2zUts5R&opi=89978449

Influenzae

Dr Tom Jefferson

Cochrane Collaboration

Jefferson.tom@gmail.com

(Activities and interests statement
with Chair)

Change of pandemic influenza definition (around 1 May 09)

- "...resulting in epidemics worldwide with **enormous numbers of deaths and illness**" vanishes
- "Current" definition emphasis on new virus and spread
- Why change? "It was a mistake, and we apologize for the confusion."
"(That definition) was put up a while ago and paints a rather bleak picture and could be very scary." The correct definition is that "pandemic" indicates outbreaks in at least two of the regions into which WHO divides the world, but has nothing to do with the severity of the illnesses or the number of deaths" (Natalie Boudou 4th of May 2009)
- And: "We wrote that definition [i.e. the one pre-dating the 4th of May 2009] with avian flu in mind" (Dr Hartl 7 Feb 2010)
- Strange mistake since all WHO pandemic docs (20004-2009) report the pre-4th of May 09 definition and it makes no mention of avian influenza

Peter Doshi

WHO is accused of “crying wolf” over swine flu pandemic

BMJ, 6 April 2010; 340 doi: <https://doi.org/10.1136/bmj.c1904>
<https://www.bmj.com/rapid-response/2011/11/02/more-changing-webpages-who>

Rapid Response:

More changing webpages at WHO

To the Editor:

Since the H1N1 outbreak, the World Health Organization (WHO) appears to be distancing itself from the idea that it ever promoted the concept of an influenza pandemic as an inevitably disastrous event. Last May, the WHO Director-General declared that highly pathogenic avian influenza "H5N1 has conditioned the public to equate an influenza pandemic with very severe disease and high mortality. Such a disease pattern is by no means inevitable during a pandemic. On the contrary, it is exceptional".¹

I disagree. It is public health organizations - not viruses - that have shaped the public's understanding of pandemic influenza.

In the BMJ last September, I documented how the WHO altered its longstanding definition of "influenza pandemic" a few weeks after the emergence of H1N1.² The Organization deleted the phrase "enormous numbers of deaths and illness" from the definition. By the new definition, pandemics need not be severe.

The classification of the H1N1 outbreak as a "pandemic" has been a central concern at the ongoing Council of Europe investigation into the World Health Organization's (WHO) handling of H1N1. UK Member of Parliament Paul Flynn (rapporteur of the inquiry) stated that "A pandemic cannot be whatever the WHO declares it is".³

In a "Key Messages" document prepared in response to the inquiry, the WHO writes:

"WHO did not change the definition of pandemic in the course of this outbreak. ... Some of the confusion may stem from the fact that there was a document on WHO's website for some months that said a pandemic would include "enormous amounts of cases and deaths". This was removed when it was brought to our attention. This information was never part of the formal definition of a pandemic and was never part of documents sent to Member States for their preparedness work. We regret the confusion it has caused".⁴

However, what the WHO calls "a document" was in fact the WHO's "Pandemic preparedness" homepage,⁵ and the definition including "enormous numbers of deaths and illness" remained on the WHO website not "for some months" but at least six years.² Indeed, numerous WHO policy documents over past years consistently described catastrophic morbidity and mortality as a fundamental characteristic of all influenza pandemics. (See box)

Now a second widely cited WHO webpage has been altered. The document was formerly titled "Ten things you need to know about pandemic influenza",⁶ four of which included: "Widespread illness will occur", "Medical supplies will be inadequate", "Large numbers of deaths will occur", and "Economic and social disruption will be great". The document has been renamed: "Ten concerns if avian influenza becomes a pandemic".⁷ (Table)

By altering the title, the WHO has changed self-described must-know information about "pandemic influenza" into "concerns" about "avian influenza". Most troubling, however, is that the contents (and datestamp) of the document remain unchanged. This raises serious ethical questions about transparency that must be addressed by all committees investigating the pandemic.³

Peter Doshi, April 12, 2010

Acknowledgements: Tom Jefferson, for his help locating relevant policy documents.

Box. WHO descriptions of pandemic influenza in policy documents

WHO 1999: "At unpredictable intervals, however, novel influenza viruses emerge with a key surface antigen (the haemagglutinin) of a totally different sub-type from strains circulating the year before. This phenomenon is called "antigenic shift". If such viruses have the potential to spread readily from person-to-person, then more widespread and severe epidemics may occur, usually to a similar extent in every country within a few months to a year, resulting in a pandemic. Annex B provides more information on these issues, and Annex C discusses hypotheses about the origin of pandemic viruses".⁸

WHO 2004: "An influenza pandemic occurs with the appearance of a new influenza virus against which none of the population has any immunity. This results in several simultaneous epidemics worldwide with enormous numbers of cases and deaths".⁹

WHO 2005: 'Influenza pandemics (worldwide epidemics) have occurred at irregular and unpredictable intervals, and have been associated with substantial morbidity, mortality and economic cost. The influenza A virus can cause pandemics and these occur as a result of changes in the virus leading to a sub-type to which no one has immunity, that can spread easily among humans and can give rise to serious disease. Appearance of such a subtype may lead to several simultaneous epidemics worldwide resulting in high numbers of cases and deaths and placing an immense burden on healthcare systems".¹⁰

WHO 2005: "An influenza pandemic (or global epidemic) occurs when a new influenza virus subtype appears, against which no one is immune. This may result in several simultaneous epidemics worldwide with high numbers of cases and deaths".¹¹

WHO 2008: "An influenza pandemic occurs when a novel influenza virus appears against which the human population has limited or no immunity, and which transmits efficiently from person to person, resulting in several simultaneous epidemics worldwide with the potential for considerable morbidity and mortality".¹²

Table. Changing WHO webpages

Before 2009 H1N1 outbreak	Since 2009 H1N1 outbreak	Date of change
WHO 2003: "An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several simultaneous epidemics worldwide with enormous numbers of cases and deaths and illness" [13]	WHO: "An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity" [14]	May 2009 [14]
WHO 2005-2009: "Ten things you need to know about pandemic influenza" [6]	WHO: "Ten concerns if avian influenza becomes a pandemic" [7]	Between Jun 2009 [15] and 17 Feb 2010 [16]

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Parliamentary Assembly Assemblée parlementaire

Paul Flynn
United Kingdom, SOC

The handling of the H1N1 pandemic: more transparency needed. Report

Strasbourg, Council of Europe, Social Health and Family Affairs Committee, 4 June 2010
http://assembly.coe.int/CommitteeDocs/2010/20100604_H1N1pandemic_e.pdf

A. Draft resolution

1. The Parliamentary Assembly is alarmed about the way in which the H1N1 influenza pandemic has been handled, not only by the World Health Organization (WHO), but also by the competent health authorities at the level of the European Union and at national level. It is particularly troubled by some of the consequences of decisions taken and advice given leading to distortion of priorities of public health services across Europe, waste of large sums of public money, and also unjustified scares and fears about health risks faced by the European public at large.

...

5. Notwithstanding the willingness of WHO and the European health institutions concerned to enter into a dialogue and conduct a review of the handling of the pandemic, the Assembly seriously regrets that they have not been willing to share some essential information, in particular to publish the names and declarations of interest of the members of the Emergency Committee of WHO and relevant European advisory bodies directly involved in recommendations concerning the handling of the pandemic. Furthermore the Assembly regrets that WHO has not moved swiftly to revise or re-evaluate its position on the pandemic and the real health risks involved, despite the overwhelming evidence that the seriousness of the pandemic was vastly overrated by WHO at the outset. In addition the Assembly regrets the highly defensive stance taken by WHO, whether in terms of [being unwilling to accept that a change in definition of a pandemic was made](#), or an unwillingness to revise its prognosis on the pandemic. (p. 1)

6. In the light of the widespread concerns raised over the handling of the H1N1 pandemic, the Assembly calls on public health authorities at international, European and national level – and notably WHO – to address in a transparent manner the criticisms and disquiet raised in the course of the H1N1 pandemic, by:

6.1. reviewing the terms of reference of their general governance bodies and special advisory bodies wherever appropriate with a view to ensuring utmost transparency and the highest level of democratic accountability regarding public health decisions;

6.2. agreeing in a transparent manner on a common set of [definitions and descriptions concerning influenza pandemics](#), involving a cross section of expertise, in order to generate a coherent world-wide understanding of such events ... (p. 1-2)

Changing the definition of a pandemic

24. A number of members of the scientific community became concerned when WHO rapidly moved towards pandemic level 6 at a time when the influenza presented relatively mild symptoms. This combined with the change in the definition of pandemic levels just before the declaration of the H1N1 pandemic heightened concerns. As Dr Wolfgang Wodarg, German epidemiologist and

former member of the Parliamentary Assembly highlighted at the public hearing on 26 January 2010, the declaration of the current pandemic was only made possible by changing the definition of a pandemic and by lowering the threshold for its declaration.

25. WHO continues to assert that the basic definition of a pandemic was never changed. Only the description of pandemic alert levels was revised when the document “Pandemic Influenza Preparedness and Response: A WHO Guidance Document” (new title) was updated in May 2009. Notwithstanding these assertions, there is clear evidence that changes were made and that, most importantly, the former criteria of ‘impact and severity’ of an epidemic in terms of the number of infections and deaths was no longer considered relevant in the updated document²¹. In other words, the pandemic could be declared without the need to show that it was likely to be severe in terms of its impact on the population (for example regarding severity of illness and death). The definition before 4 May 2009 was worded as follows: “An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide with enormous numbers of deaths and illness. With the increase in global transport, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world”, whilst the same definition became the following on WHO’s website after this date: “A disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide epidemic of a disease. An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity ... Pandemics can be either mild or severe in the illness and death they cause, and the severity of a pandemic can change over the course of that pandemic”.

26. Shortly afterwards, WHO spokeswoman Nathalie Boudou justified the change by saying that the “old” definition was in “error” and had been removed from the WHO website. She stated that the correct definition was that a “pandemic indicated outbreaks in at least two of the regions into which WHO divides the world, but has nothing to do with the severity of the illnesses or the number of deaths”.²² These subsequent definitions and comments presented at a time when the pandemic was imminent were confusing for both public health professionals involved and attentive observers amongst the European public at large.

27. The rapporteur strongly recommends that further in-depth work be done by all stakeholders concerned with a view to agreeing on a common definition and description of what an influenza pandemic is. This should become the central element of clear international guidelines for national pandemic preparedness planning. He considers that, even if WHO did not intend to modify the pandemic definition in a way that would allow for an accelerated announcement of such an event in June 2009, the changes of relevant disease descriptions and indicators at a time when a major influenza infection was already approaching was highly inappropriate and carried out in a way which could be considered as being non-transparent. It also contributed to the doubts raised concerning undue influence on decision-makers, because all critical observers of the situation wondered if this untimely change was absolutely necessary and question who benefited most from it. (p. 8-10)

...

56. The Parliamentary Assembly should encourage member states to closely follow relevant review processes recently launched within WHO and European institutions involved in public health matters, in order to ensure that their voices may have more impact in future pandemic situations than seems to have been the case in the current H1N1 pandemic. There is strong evidence that some governments, including China, Britain, Japan and a dozen other countries, at some stage of the H1N1 pandemic, urged WHO not to use the proposed new definition of a “pandemic” and “be very cautious about declaring the arrival of a swine flu pandemic, fearing that a premature announcement could cause worldwide panic and confusion.” In reply to their doubts, WHO said “it would certainly look at [this issue] very closely” just before declaring the pandemic on 11 June 2009. 4 (p. 15-16).

Gérard Bapt

L'OMS invente l'alerte sanitaire perpétuelle

La Tribune, 16 Juin 2010, 4:31

<https://www.latribune.fr/opinions/20100616trib000520642/l-oms-invente-l-alerte-sanitaire-perpetuelle.html>

A l'heure de la mondialisation, il est souhaitable que, face à un nouveau virus, les Etats coordonnent la protection de leurs populations. Il est logique que l'organisation mondiale qu'ils ont créée, l'OMS, soit chargée d'élaborer une stratégie commune de réponse à toute menace épidémique émergente, y compris les pandémies grippales. Mais une stratégie internationale de gestion d'une affection émergente doit être bâtie sur une définition précise et stable de l'épidémie à combattre. Qu'en est-il pour la pandémie virale ?

Le 24 avril 2009, jour de "l'alerte sanitaire mondiale" proclamée par l'OMS, quinze cas de grippe étaient attribués au H1N1 type A. Le directeur du CDC (Centre de surveillance des maladies infectieuses aux Etats-Unis), Richard Besser, déclarait alors : "nous allons expertiser le nouveau virus selon trois dimensions : est-il nouveau pour la population ? Cause-t-il des affections sévères ? Est-il aisément transmissible ?" Le 11 juin, le directeur général de l'OMS, Margaret Chan, déclenchait la phase 6 de la pandémie, alors que 144 décès étaient attribués à la grippe A dans le monde. Que s'est-il passé ?

Avant le 4 mai 2009, le site de l'OMS indiquait : "une pandémie de grippe se produit lorsque apparaît un nouveau sous-type de virus dont personne n'est à l'abri. Plusieurs épidémies peuvent se déclarer simultanément dans le monde, provoquant un grand nombre de cas et de décès." Après le 4 mai 2009, sur le même site, les notions de morbidité et de mortalité ont disparu. La pandémie n'aurait pu être déclarée sans ce changement de définition.

En clair, l'OMS a modifié les règles du jeu en cours de partie ! C'est au bout d'une longue maturation que ce changement a été effectué. Les efforts des firmes productrices de vaccins et de certains experts n'y ont toutefois pas manqué ! En témoigne l'examen du compte rendu de la réunion regroupant OMS, agences et firmes à Genève les 11 et 12 novembre 2004, ou celui de l'assemblée de l'ESWI, financée par l'industrie et présidée par le très contesté professeur Osterhaus, réunie en janvier 2009 à Bruxelles.

Malgré la nouvelle définition, le site de l'OMS continue à renvoyer à des recommandations basées sur des prévisions très alarmistes, relayées dans les différents pays. En France, le professeur Flahaut affiche ainsi, le 12 mai 2009, la "prévision modérée" de 30.000 décès. Plus tard, le très officiel Institut de veille sanitaire (INVS) livre en septembre des fourchettes d'évaluation actualisées, allant de 6.400 décès dans le scénario le plus optimiste, à 96.000 décès dans le plus pessimiste, avec 640 à 4.800 décès pour les enfants de 0 à 4 ans... A cette date étaient pourtant connues de nombreuses données provenant de pays ayant connu le pic pandémique, notamment l'Australie, la Nouvelle-Zélande et les pays d'Amérique latine. Les publics vulnérables étaient identifiés, la faible létalité du virus documentée.

Des stratégies de réponse aux pandémies basées sur des prévisions catastrophistes ne peuvent qu'éroder la confiance des populations et des professionnels de santé, surtout si la communication publique y contribue fortement. Ainsi Thierry Saussez, responsable de la communication

gouvernementale, a-t-il indiqué à la commission d'enquête de l'Assemblée nationale que, face à une menace, il fallait partir des prévisions les plus graves... Les hautes capacités des réseaux d'alerte dispersés dans le monde donnent désormais des informations extrêmement précoces : le 24 avril, lorsque l'OMS déclare une "urgence de santé publique de portée internationale", quelques dizaines de syndromes grippaux sans aucun décès sont attribués au H1N1.

A identification très précoce devrait désormais correspondre capacités d'adaptation et de souplesse des plans de gestion de crise sanitaire, en fonction de la dangerosité du virus émergent. Ce n'est pas la voie choisie par l'OMS, appuyée par les avis des experts sélectionnés par l'industrie du vaccin. En retirant le 4 mai la dimension de morbidité-mortalité du phasage de la mise en oeuvre de sa stratégie, l'OMS nous condamne à l'"alerte sanitaire mondiale" à perpétuité.

Antoine Flahault

(citant de larges extraits des travaux de Patrick Zylberman,
titulaire de la Chaire d'Histoire de la Santé de l'Ecole des Hautes Etudes en Santé Publique)

OMS: H1N1 Autre Definition?

Slate, 27 June 2010, A(H1N1) Journal de la Pandémie
<https://blog.slate.fr/h1n1/2010/06/27/oms-h1n1autre-definition/>

L'OMS aurait-elle changé la définition de la pandémie le 4 mai 2009 pour d'obscures raisons?

L'historien Patrick Zylberman, titulaire de la Chaire d'Histoire de la Santé à l'EHESP, dont les travaux portent notamment sur l'histoire des grandes pandémies est formé:

Contrairement à ce qui est dit [parfois \(R. Schabas and N. Rau, janvier 2010\)](#), la définition de la « pandémie » n'a pas été modifiée en 2009. Je parle ici de la définition qui fait loi pour l'Organisation ; je ne parle pas du point de vue exprimé par tel ou tel groupe d'experts.

Le professeur Zylberman explique que la définition de la pandémie est inscrite dans les plans de préparation, qu'il nous propose de situer dans la hiérarchie des textes produits par l'OMS:

Les plans de préparation pandémique sont des documents inter-gouvernementaux engageant à la fois l'OMS et les Etats membres. Ainsi, la dernière mouture du Plan pandémie d'avril 2009 est le résultat du travail de plus de 135 experts issus de 48 pays ; les travaux ont débuté en 2007 et se sont achevés en février 2009 ; plus de 600 observations ont été déposées par les Etats.

Patrick Zylberman reconnaît cependant que la validité des pages postées sur le site Internet de l'OMS pose parfois problème, et demande à l'OMS d'éclaircir les raisons qui les ont conduit à laisser publier une définition erronée (car différente des plans intergouvernementaux) jusqu'au 4 mai 2009, pour enfin rétablir la version initiale de cette définition, conforme à celle des plans à partir de cette date.

Entrons un peu plus dans les détails de la controverse (pardonnez-nous les citations verbatim en langue anglaise du plan intergouvernemental de l'OMS,* nous n'avons pas la traduction française de ces documents au moment de l'écriture de ce billet). L'OMS en 2009, peut-on lire ([Stuart Paterson, nov. 2009](#)), se contenterait d'une vague définition de la pandémie grippale comme «épidémie à l'échelle mondiale», sans plus mentionner les dérives génétiques et antigéniques du virus. «C'est carrément faux», s'insurge Patrick Zylberman.

* - <https://web.archive.org/web/20090509051754/http://www.who.int/csr/disease/influenza/PIPGuidance09.pdf>

Ainsi, le plan Pandémie de l'OMS publié en avril 2009 (page 14) définit-il une pandémie grippale de la manière suivante:

«An influenza pandemic occurs when an animal influenza virus to which most humans have no immunity acquires the ability to cause sustained chains of human-to-human transmission leading to community-wide outbreaks. Such a virus has the potential to spread worldwide, causing a pandemic».

Glissements et cassures sont expressément mentionnées: « The development of an influenza pandemic can be considered the result of the transformation of an animal influenza virus into a human influenza virus. At the genetic level, pandemic influenza viruses may arise through:

- *Genetic reassortment: a process in which genes from animal and human influenza viruses mix together to create a human-animal influenza reassortant virus;*
- *Genetic mutation: a process in which genes in an animal influenza virus change allowing the virus to infect humans and transmit easily among them ».*

Le plan Pandémie grippale 2009 de l'OMS ne fait d'ailleurs que reprendre en la développant la définition qui figurait dans la [version de 2005](#) : il y a menace pandémique lorsqu'« un sous-type qui n'a pas circulé chez l'homme pendant au moins plusieurs décennies et vis-à-vis duquel la grande majorité de la population humaine n'est donc pas immunisée » vient à se répandre dans les populations humaines.

Puis survient une nouvelle controverse, à propos de la gravité. [Schabas et Rau](#) (janvier 2010, cité ci-dessus) reprochent alors à l'OMS de s'être cramponnée de manière rigide à ses définitions, ignorant le désaccord grandissant entre les faits et ses notions dès la crise mexicaine. Ainsi la définition même de la pandémie a fait l'objet d'un vif débat dans la première période de la pandémie. Patrick Zylberman nous rappelle que *«certains experts suggéraient alors d'intégrer une estimation de la gravité de la maladie dans la définition de la pandémie. Le comité technique de la grippe s'est réuni à Genève le 5 juin 2009 afin de discuter de l'introduction d'un index de gravité à la phase 6 du système d'alerte (le passage à la phase 6 n'était pas à l'ordre du jour de cette réunion). Il s'agissait de diviser la phase 6 en trois sous-niveaux tenant compte du degré de gravité de la maladie ([Nebehay, mai 2009](#)). Comme eût dit Victor Hugo, c'eût été là embrouiller un problème par des éclaircissements !».*

L'OMS avait du reste répliqué en mai 2009 à ceux qui exigeaient l'introduction d'une dose de «gravité» dans la définition de la pandémie:

- Que la gravité de la grippe était imprévisible
- Que ce qui apparaît « bénin » dans les pays bien pourvus en médicaments et système de soin peut être « grave » dans les pays qui en sont dépourvus et où l'état général de la population n'est pas très bon
- Que l'OMS a une mission limitée (détermination de l'extension de la transmission, coordination des mesures de santé publique à l'échelle internationale, sélection et lancement de la fabrication du vaccin, supervision des échanges d'informations scientifiques) et que c'est aux Etats eux-mêmes à gérer la crise ([D. Butler, mai 2009](#)).

Mais laissons les derniers mots de ce billets à notre historien (que je remercie vivement de son éclairage sur cette épineuse question où se mêle beaucoup de mauvaise foi de la part de nombreux experts en verve contre l'organisation internationale) :

«Le caractère imprévisible et difficilement calculable de la létalité est bien illustré par les soubresauts de de l'opinion des experts en Grande Bretagne en juin et juillet où la létalité estimée a constitué un instrument de « gestion de crise». Cette létalité estimée a connu trois phases:

- *Très haute dans les scénarios du pire en juillet : voir les déclarations de Liam Donaldson relatives au 65 000 décès prévisibles (devenus 19 000 en septembre et 1 000 en octobre) ([Laurance, nov. 2009](#))*
- *un regain d'anxiété quand l'estimation de l'incidence a été multipliée par 5 dès le passage à la confirmation clinique des cas*
- *une forte estimation à la baisse dans études rétrospectives*

La chute de la létalité estimée au cours du temps: 0,25% en juin/0,026% en décembre (Angleterre et Pays de Galles : 1918=3%; 1957 et 1968 = 0,2%).

Ce débat est d'autant plus surprenant que cela fait longtemps que l'on critique l'idée d'introduire une notion de sévérité dans la définition de la pandémie. Ainsi, [dans la revue Science, en mars 1943](#), un épidémiologiste de l'Université du Michigan, le Dr Thomas Francis, brocardait-il «ceux qui parlent de pandémie grippale comme de quelque chose de spécial et continuent

d'employer ce terme dans l'acception non fondée de sévérité au lieu de distribution», c'est-à-dire de répartition géographique des cas. Le 11 juin, Chan s'en tenait donc à la définition initiale: extension de la propagation à plus d'une région de l'OMS ([S. Connor, 12 juin 2009, The Independent](#))».

*Antoine Flahault, citant de larges extraits des travaux de **Patrick Zylberman**, titulaire de la Chaire d'Histoire de la Santé de l'Ecole des Hautes Etudes en Santé Publique.*

Risk = Hazard + Outrage

**The Peter M. Sandman
Risk Communication Website**

Peter M. Sandman and Jody Lanard

**The “Fake Pandemic” Charge Goes Mainstream
and WHO’s Credibility Nosedives**

Psandman, 29 June 2010

<https://www.psandman.com/col/WHO-credibility.htm>

...

WHO’s Failure to Acknowledge that it Changed Some Flu Pandemic Definitions and Descriptions Just as H1N1 Was Emerging

...

About definitions and redefinitions

All definitions are stipulative. Words don’t come with their meanings stenciled on their foreheads. We forge their meanings by how we use them...

WHO cannot decree that the word “pandemic” (or the term “flu pandemic”) means just what it chooses. Definitions are negotiated agreements ... and sometimes the negotiations break down.

It is always dangerous to use a word in a way you know your audience is likely to misperceive. One of us (Peter) wrote a column on this topic in 2005, entitled “Risk Words You Can’t Use.” If he were revising that column today, “pandemic” might end up on the list. But we really need the word “pandemic.” That’s why we have to negotiate what it means, not just stop using it.

Sometimes you redefine a word – use it differently than your audience uses it – in order to point out something important about other people’s mental models. That’s what the “Risk = Hazard + Outrage” formula tries to do. It redefines “risk” in an effort to persuade people to change how they see the risk communication task. But any time you do that, you know before you start that you’ll need to allocate a lot of time and effort to troubleshooting: “People understandably think I mean X when I say that, but I don’t. I mean Y. Let me tell you why I’m using the term in such an unexpected way....”

It may have been a mistake for WHO to take on the extra burden of changing its definitions and descriptions of pandemic phases just as novel H1N1 appeared. It was certainly a mistake for WHO to take on this extra burden without taking it seriously as a potential risk communication problem.

And as skepticism and suspicion emerged and then grew, it was a mistake for WHO to avoid conceding (and appear to be denying) the particular changes that had become most salient to the skeptics, and then to a broader audience: the changes in WHO’s definitions of the pandemic phases, and the changes in WHO’s most prominent definition/description of an influenza pandemic.

If the swine flu pandemic had been more severe, the changes in WHO’s pandemic phase definitions wouldn’t have mattered much. And the absence of a severity criterion in WHO’s definition/description of an influenza pandemic would have made no difference at all. But once the moderate/mild mismatch arose between WHO’s portrayal of the pandemic and the public’s view of it, the need to acknowledge and explain the redefined flu pandemic phases and the revised definition/description of an influenza pandemic became urgent. Yet WHO chose not to provide the needed acknowledgments and explanations.

For years, the word “pandemic” and the phrase “flu pandemic” meant absolutely nothing to most people. These were terms of art, used almost exclusively by experts. In much of the world, even the word “influenza” still doesn’t ring a bell, while the word “flu” often refers to any mild respiratory infection, and sometimes even non-respiratory ones.

Experts, meanwhile, have often used “pandemic” and “flu pandemic” rather loosely.

In the professional literature, there are varying definitions of influenza pandemics. Pretty much all the definitions specify that a flu pandemic is a widespread outbreak of a novel flu virus subtype that does significant health harm to humans. But how widespread, how novel, and how much harm are sometimes specified in discrepant ways, and often not specified at all. With regard to novelty, for example, some definitions state that a population must have “no” immunity, while others state that there must be “little immunity.” Some definitions say categorically that a “new subtype” of influenza is required, implying that a reassorted, antigenically shifted virus of the same subtype as one that is currently circulating cannot be considered “novel” enough to cause a pandemic, nor can one that re-emerges from a laboratory freezer decades after it last circulated. Other definitions stipulate that a subtype can be considered “novel” enough even with the same H and N as a currently or previously circulating flu virus.

Moreover, there is a huge professional literature that describes flu pandemics in ways that often go beyond the specifications in formal definitions. The boundary between definitions and descriptions isn’t a bright line. This unclear boundary has figured periodically in the controversy over what exactly WHO did just as the novel H1N1 virus was beginning to spread. Leave aside the poorly framed charge that WHO changed the definition of a pandemic. Did it change the definition of a flu pandemic? Or did it merely publish yet another description of what flu pandemics are like? Do new definitions of the phases of flu pandemics constitute, collectively, a new definition of a flu pandemic – or do they just describe it differently?

This much is indisputable: WHO did change the role of severity in its definitions and descriptions of the phases of an influenza pandemic. It is those phase definitions and descriptions that ultimately determine whether and when WHO declares that an influenza pandemic has begun. Whether or not WHO redefined the term “flu pandemic,” it did rejigger the criteria for declaring a flu pandemic. In particular, it took severity off the list of potential criteria.

How and why WHO changed its use of the term “influenza pandemic”

The word “pandemic” came into common use among nonprofessionals only when WHO and other health agencies started issuing warnings about the specter of bird flu. Bird flu (H5N1) in humans is certainly a novel subtype. And it is potentially incredibly serious; so far, it has killed over half the people who caught it – compared to 2–3 percent for the 1918 pandemic (the poster child of serious flu pandemics) and well under one tenth of one percent for swine flu so far.

The saving grace of bird flu is that it’s extremely difficult to catch. Except for a handful of conspiracy nuts who murmur about cover-ups, there is universal agreement that bird flu is a panzootic or epizootic (among birds), but not a pandemic or epidemic because as a human disease it is rare and hard to catch, not widespread and easy to catch. Bird flu won’t go pandemic unless the virus acquires the ability to pass easily from one person to another. If that ever happens, and if the bird flu virus remains anywhere near as virulent as it is today, it will be by far the worst influenza pandemic (and the worst disease catastrophe) in history.

Bird flu warnings said, in essence: “A bird flu pandemic might well be horrific. Thank God bird flu hasn’t gone pandemic yet. Hope to God it never does.” So if the general public learned *any* definition of a pandemic, it learned a scary one.

With bird flu in the backs of their minds, WHO officials kept on refining and streamlining the complex WHO guidance document for phased planning and response before, during, and after influenza pandemics.

In the 1999 and 2005 versions, severity had been one of many factors that would (1999) or could (2005) be taken into account in decisions about whether to raise the pandemic phase in the run-up to declaring a pandemic.

Here's a key [reference to severity](#) in the 1999 version:

The Pandemic will be declared when the new virus sub-type has been shown to cause several outbreaks in at least one country, and to have spread to other countries, with consistent disease patterns indicating that *serious morbidity and mortality* is likely in at least one segment of the population.

In [the 2005 version](#), severity appears most prominently in this footnote, appended to the definitions of pandemic phases and reiterated five times throughout the document:

The distinction between *phase 3*, *phase 4* and *phase 5* is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include: rate of transmission; geographical location and spread; severity of illness; presence of genes from human strains (if derived from an animal strain); other information from the viral genome; and/or other scientific information.

Officials and their expert advisors had reservations about both of these formulations. The severity of a flu outbreak can vary from region to region. It isn't necessarily obvious in the early days of a new flu virus, and it can change suddenly (or slowly) as the virus mutates. It was clear that severity should be considered in figuring out what to do about a pandemic, but it was also clear that a pandemic, even a very serious pandemic, could look mild at the outset. Two of the last three pandemics had second waves more severe than the first – in the case of 1918, vastly more severe.

So when WHO published its revision of the 2005 guidance document [in April 2009](#), the newest version included the warning that “if symptoms are mild and not very specific, an influenza virus with pandemic potential may attain relatively widespread circulation before being detected; thus, the global phase may jump from Phase 3 to Phases 5 or 6.” The new version also removed the footnote that had been in the 2005 version, the footnote that had specified severity as one of the factors that “may” be considered when ratcheting from pandemic Phase 3 to 4 to 5. In the 2009 document, the revised phases were introduced in a section explicitly entitled “Definition of the phases.”

Of course the official WHO influenza pandemic “guidance document” wasn't the only document WHO published that talked about flu pandemics. There were lots of others. One that became controversial after novel H1N1 emerged was a document entitled “Pandemic Preparedness,” which had been on the WHO website [since as early as February 2003](#). (Note: This page, originally on the WHO website, is now privately archived and may load very slowly.) Its very first paragraph offered a flu pandemic definition/description of its own that put severity front-and-center – far more so than any version of the guidance document:

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with *enormous numbers of deaths and illness*.

The 2009 updated guidance document had been in the works for a couple of years. But it was hurriedly posted on the WHO website just two or three days after H1N1 was first identified in late April 2009. Posted at the same time was a [two-paragraph note](#) explaining why WHO thought a new version was needed. The explanation did not mention anything about severity as an issue in the run-up to a pandemic declaration, most likely because it never occurred to WHO that eliminating references to severity was going to look evil later when people started wondering whether WHO had invented a fake pandemic-for-profit ... a possibility that never crossed WHO officials' minds.

It is crucial to remember that at the time the new guidance document was posted, the early news from Mexico was terrifying. On April 24, WHO issued its [first announcement](#) about the mysterious pneumonia cases in Mexico City:

In the Federal District of Mexico, surveillance began picking up cases of ILI starting 18 March. The number of cases has risen steadily through April and as of 23 April there are now more than 854 cases of pneumonia from the capital. Of those, 59 have died.

If that initial assessment from Mexico had been representative of swine flu's ultimate case fatality rate, we would have been at the start of a pandemic about three times as bad as the pandemic of

1918. Fairly quickly – but not instantaneously – it became clear that there were far more cases (and thus a much lower percentage of deaths) than the earliest Mexico City news had suggested. Within weeks, the case fatality rate of the new flu virus began to look more like the data from the much milder pandemics of 1957 and 1968. By mid-summer it began to look like the new pandemic might even be milder than the seasonal flu, in terms of its case fatality rate. But the first official Mexican report, in conjunction with cases popping up in California and Arizona, was justifiably terrifying to anyone who understood how bad a flu pandemic could be.

In April 2009, when WHO posted its newest version of its pandemic guidance document, it simply wasn't worrying about a pandemic that might be too mild to qualify as real.

When WHO posted its new 2009 guidance document, it took the 2005 version off its website – though of course any reasonably skilled computer user could easily find cached copies and repost them. (Note: It is back on again.) Nor did WHO scour its website for other WHO documents with inconsistent references to pandemic severity. There were higher priorities. And officials were no doubt used to such inconsistencies, and used to reading past them.

But about a week after the new guidance document was posted, a CNN reporter asked WHO officials about that “[Pandemic Preparedness](#)” document, the one that said a flu pandemic involved “enormous numbers of deaths and illness.” WHO immediately removed the document from its website – and, needless to say, the critics (and even non-critics) immediately found cached versions to post on their own websites.

The version of the “[Pandemic Preparedness](#)” page that's posted on the WHO website today has new definitions/descriptions of both a generic pandemic and an influenza pandemic. It doesn't say anything about enormous numbers of deaths. It emphasizes that “Pandemics can be either mild or severe in the illness and death they cause, and the severity of a pandemic can change over the course of that pandemic.” So “mild” is still a contender. It also states that “An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity.” No immunity? Does that mean that novel H1N1 can't have caused a pandemic, since many people [had some immunity](#)? It is really hard to get these definitions/descriptions just right, especially if people are going to hold you to them. So it's silly to get defensive when you decide to change them.

What about the earlier version of “Pandemic Preparedness,” the one that specified “enormous numbers of deaths”? Here's what WHO communication officer Natalie Boudou [told the CNN reporter](#) who first asked about it: “It was a mistake, and we apologize for the confusion.... [That definition/description] was put up a while ago and paints a rather bleak picture and could be very scary.”

Months later, much more senior WHO officials would repeatedly insist that they had never, ever, changed the “definition” of a “pandemic,” and that severity had never been a potential criterion – ignoring both their abandonment of that footnote in the 2005 guidance document and their quick effort to disappear the older version of the “Pandemic Preparedness” document. Natalie Boudou could have taught them how to acknowledge an indisputable reality more gracefully.

WHO did not update its pandemic guidance and pandemic phase definitions in order to justify declaring swine flu a pandemic. We can find nothing in the 1999 or 2005 guidance documents that would have stopped WHO from declaring that a pandemic was underway in June 2009. In fact, WHO might have declared swine flu a pandemic earlier under the old standards than the new, because the new ones had tougher criteria for geographical spread, requiring WHO to wait until the disease was spreading widely in at least two WHO regions. Because North and South America were part of the same WHO region, the new guidance document meant waiting until the swine flu virus was spreading widely in Europe as well.

WHO was simply trying to give national governments the benefit of its best, most recent thinking about flu pandemic phases as the world confronted the novel H1N1 virus.

Throughout May and June 2009, WHO – advised by its new Emergency Committee – kept trying to assess whether H1N1 met the criteria for Phase 6, a full-fledged influenza pandemic. Many

influenza experts argued that it did, and chafed at WHO's hesitation. But many national governments were afraid of over-alarming their publics, and successfully convinced WHO to wait. Their best technical argument was that H1N1 didn't yet meet the new widespreadness criteria.

There wasn't a lot of discussion back then about whether H1N1 was too mild to be called a pandemic. Mortality data in May and June were far less alarming than the earliest news from Mexico had been. H1N1 was beginning to look like a mild pandemic, more like the 1957 and 1968 pandemics than the horrific 1918 pandemic. But it was early days yet. The data on pandemic severity were still extremely spotty and tentative, and no one had any basis for deciding that H1N1 would or wouldn't become more virulent as it spread.

So yes, right after H1N1 was identified as a novel flu virus causing human-to-human spread in Mexico, WHO introduced new flu pandemic phase definitions that did not include an earlier footnote specifying that "severity of illness" "may be considered" as one of many factors in assessing the distinctions among phases 3, 4, and 5.

But WHO didn't make this change in order to make it easier to declare H1N1 a pandemic. If anything, the new phase definitions/descriptions made it harder for WHO to declare H1N1 a pandemic, because they gave national governments an argument that the virus wasn't widespread enough yet. But we don't think they were introduced for that purpose either. They were introduced because they were more in line with current knowledge, and with changes in the International Health Regulations and other protocols that had been updated since 2005. And they were introduced because they had been in development for about two years, and suddenly it looked like they were urgently needed right now.

...



Alain Milon
fait au nom de la Commission d'enquête sur la grippe A

La grippe A (H1N1)v: Retours sur «la première pandémie du XX^e siècle»
Rapport n° 685 (2009-2010): 45-47

Paris, Senéte, 29 July 2010

<https://www.senat.fr/rap/r09-685-1/r09-685-11.pdf>

<https://www.senat.fr/rap/r09-685-1/r09-685-1.html>

N° 685

SÉNAT

SESSION EXTRAORDINAIRE DE 2009-2010

Rapport remis à Monsieur le Président du Sénat le 29 juillet 2010

Enregistré à la Présidence du Sénat le 29 juillet 2010

Dépôt publié au Journal Officiel - Édition des Lois et Décrets du 30 juillet 2010

RAPPORT

de la commission d'enquête (1) sur le rôle des firmes pharmaceutiques dans la gestion par le Gouvernement de la grippe A (H1N1)v, créée sur la demande du groupe Communiste, Républicain et Citoyen et des sénateurs du Parti de Gauche, dont la Conférence des Présidents a pris acte le 10 février 2010, en vertu de l'article 6 bis, alinéa 3, du Règlement du Sénat.

Tome I : rapport

Président
M. François AUTAIN,

Rapporteur
M. Alain MILON,

Sénateurs.

2. La «fausse pandémie»

<https://www.senat.fr/rap/r09-685-1/r09-685-111.html>

Les critiques sur la fausse alerte pandémique ont été renforcées par le changement de définition de la pandémie grippale auquel aurait procédé l'OMS, dans les mois ayant précédé la déclaration du passage en phase 6 le 11 juin 2009. Dans sa proposition de recommandation, à l'origine du rapport de l'APCE présenté par M. Paul Flynn, M. Wolfgang Wodarg évoque ainsi de «*fausses pandémies*».

Le programme mondial 2009 de l'OMS de lutte contre une pandémie grippale s'inscrit dans le cadre défini par le règlement sanitaire international (RSI) révisé en 2005. Le RSI révisé a établi une procédure en cas d'*urgence de santé publique de portée internationale*», et non de pandémie, ce terme ne figurant pas dans le RSI. En application des dispositions du premier alinéa (1.) de l'article 12 du RSI, «*le directeur général détermine, sur la base des informations qu'il reçoit, en particulier de l'Etat Partie sur le territoire duquel un événement se produit, si un événement constitue une urgence de santé publique de portée internationale* ».⁴⁷ Les recommandations de l'OMS faisant suite au passage en phase 6 du niveau d'alerte pandémique ont été la réponse à une urgence de santé publique.

Cependant, lors de son audition par la commission d'enquête,⁴⁸ M. Tom Jefferson a observé que «*la grippe pandémique est ce que l'OMS décide qu'elle est*», en s'appuyant sur les travaux d'un étudiant doctorant à Harvard, M. Peter Doshi, à qui l'utilisation d'un logiciel Internet, Wayback Machine, a permis de retrouver les anciennes définitions : de 2003 à 2009, une pandémie a été définie par l'apparition de «*plusieurs épidémies simultanées à travers le monde avec un grand nombre de décès et de maladies*»; un changement a été opéré entre le 1^{er} et le 9 mai 2009, faisant disparaître le critère de gravité. Toujours selon ces travaux, le contenu des pages Internet de l'OMS a été modifié, sans changer la date affichée.

Pour sa part, l'OMS affirme que la définition de base de la pandémie n'a jamais changé. Citée par M. Tom Jefferson lors de son audition par la commission des questions sociales, de la santé et de la famille de l'Assemblée parlementaire du Conseil de l'Europe le 29 mars 2010, Mme Nathalie Boudou, porte-parole de l'OMS, a justifié le changement de définition sur le site de l'OMS par la correction d'une «*erreur*», en affirmant que la définition correcte d'une pandémie devait faire référence à l'apparition de foyers dans au moins deux régions du monde, mais n'avait rien à voir avec la gravité de la maladie ou le nombre de décès.⁴⁹

La comparaison des documents de l'OMS (*cf. encadré ci-après*) montre que, dès 1999, les critères de nouveauté et d'extension géographique du virus ont toujours été au cœur de la définition de la pandémie (dont l'étymologie même renvoie à sa seule diffusion), avant la gravité «*probable*» que revêt une pandémie. En 2005, si la gravité n'est qu'un des critères de passage d'une phase à une autre dans le plan mondial actualisé de l'OMS de préparation à une pandémie, un autre document de l'OMS de planification face à une pandémie grippale mentionne un «*grand nombre de cas et de décès*». En revanche, dans le programme mondial de l'OMS d'avril 2009 de lutte contre une pandémie grippale, selon la version actuellement consultable sur son site Internet,⁵⁰ la gravité n'est plus un critère de définition de la pandémie.

Evolution de la définition d'une pandémie grippale par l'OMS

En 1999

Dans le plan mondial de l'OMS de 1999 de préparation à une pandémie de grippe, une pandémie apparaît lorsque sont réunis des critères géographiques et de gravité:

«*La pandémie sera déclarée quand il aura été montré qu'un nouveau sous-type de virus a causé des flambées sérieuses dans au moins un pays et s'est étendu à d'autres pays, avec des types de maladies indiquant qu'une grave morbidité et mortalité sont probables dans au moins un segment de la population*» («*The Pandemic will be declared when the new virus sub-type has been shown to*

cause several outbreaks in at least one country, and to have spread to other countries, with consistent disease patterns indicating that **serious morbidity and mortality** is likely in at least one segment of the population».⁵¹

En 2005

Dans le plan mondial de l'OMS de 2005 de préparation à une pandémie de grippe,⁵² la pandémie correspond à une «*transmission accrue et durable dans la population générale*». Si la «*gravité de la maladie*» figure explicitement (note p. 9) parmi les critères permettant de distinguer les phases 3, 4 et 5, les exemples donnés en phase 5 prévoient, en revanche, la possibilité de cas isolés et en nombre limité, avant le déclenchement de la phase 6.

Mais dans la «Liste de contrôle OMS pour la planification préalable à une pandémie de grippe» diffusée par l'OMS en avril 2005,⁵³ la pandémie est définie explicitement par un grand nombre de cas et de décès:

«Une pandémie de grippe survient lorsqu'apparaît un virus nouveau contre lequel le système immunitaire humain est sans défense, donnant lieu à une épidémie mondiale provoquant un nombre considérable de cas et de décès. Le nouveau virus grippal est d'autant plus susceptible de se propager rapidement dans le monde que les transports internationaux ainsi que l'urbanisation et les conditions de surpeuplement s'intensifient».

En 2009

Le plan mondial 2009 de l'OMS de préparation à une pandémie de grippe définit clairement la pandémie du seul point de vue de sa diffusion géographique :

- en phase 5: des «*flambées soutenues à l'échelon communautaire dans au moins deux pays d'une même région OMS*» ;

- en phase 6, le virus provoque «*des flambées soutenues à l'échelon communautaire dans au moins un pays d'une autre région de l'OMS*».⁵⁴

Les critères de définition d'une pandémie ont donc été modifiés, un peu plus d'un mois avant le passage en phase 6, le 11 juin 2009, pour une pandémie alors reconnue comme étant «*de gravité modérée*». Cependant, rien n'indique une modification intentionnelle de la définition, la procédure suivie par l'OMS répondant à une urgence de santé publique internationale, en application du dispositif prévu par le RSI modifié en 2005.

Lors de son audition par la commission d'enquête, M. Wolfgang Wodarg a cependant estimé que la déclaration de l'état de pandémie a été permise par le changement de définition,⁵⁵ en s'interrogeant sur l'influence de l'industrie pharmaceutique qui se préparait de longue date à une nouvelle pandémie grippale. La proposition de recommandation de M. Wolfgang Wodarg estime que «*le soin de définir une pandémie alarmante ne doit pas être soumis à l'influence des marchands de médicaments*».

Ces interrogations soulèvent la question de la gestion par l'OMS des conflits d'intérêts entre ses experts et l'industrie pharmaceutique.

⁴⁷ Source : site de l'OMS (http://whqlibdoc.who.int/publications/2008/9789242580419_fre.pdf).

⁴⁸ Audition du 19 mai 2010.

⁴⁹ Op. cit. , p. 12.

⁵⁰ Source: <http://www.who.int/csr/disease/influenza/pipguidance09FR.pdf>.

⁵¹ Source: http://whqlibdoc.who.int/hq/1999/WHO_CDS_CSR_EDC_99.1.pdf.

⁵² Source: http://www.who.int/csr/resources/publications/influenza/FluPrep_F2.pdf.

⁵³ Source: Liste de contrôle OMS pour la planification préalable à une pandémie de grippe. – OMS, 2005, http://www.who.int/csr/resources/publications/influenza/FluCheck_F4web.pdf.

⁵⁴ Op. cit. , p. XIII.

⁵⁵ Audition du 16 juin 2010.



Peter Doshi

The elusive definition of pandemic influenza

L'insaisissable definition de la grippe pandemique

La evasiva definicion de la gripe pandemica

Bulletin of the World Health Organization, 1 July 2011, 89(7): 532-538.

doi: 10.2471/BLT.11.086173

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3127275/>

Abstract:

There has been considerable controversy over the past year, particularly in Europe, over whether the World Health Organization (WHO) changed its definition of pandemic influenza in 2009, after novel H1N1 influenza was identified.

Some have argued that not only was the definition changed, but that it was done to pave the way for declaring a pandemic. Others claim that the definition was never changed and that this allegation is completely unfounded. Such polarized views have hampered our ability to draw important conclusions.

This impasse, combined with concerns over potential conflicts of interest and doubts about the proportionality of the response to the H1N1 influenza outbreak, has undermined the public trust in health officials and our collective capacity to effectively respond to future disease threats.

WHO did not change its definition of pandemic influenza for the simple reason that it **has never formally defined pandemic influenza**. While WHO has put forth many descriptions of pandemic influenza, it has never established a formal definition and the criteria for declaring a pandemic caused by the H1N1 virus derived from "pandemic phase" definitions, not from a definition of "pandemic influenza".

The fact that despite ten years of pandemic preparedness activities no formal definition of pandemic influenza has been formulated reveals important underlying assumptions about the nature of this infectious disease. In particular, the limitations of "virus-centric" approaches merit further attention and should inform ongoing efforts to "learn lessons" that will guide the response to future outbreaks of novel infectious diseases.

Introduction

In 2009, governments throughout the world mounted large and costly responses to the H1N1 influenza outbreak. These efforts were largely justified on the premise that H1N1 influenza and seasonal influenza required different management, a premise reinforced by the decision on the part of the World Health Organization (WHO) to label the H1N1 influenza outbreak a "pandemic". However, the outbreak had far less serious consequences than experts had predicted, a fact that led many to wonder if the public health responses to H1N1 had not been disproportionately aggressive.¹⁻³ In addition, concern over ties between WHO advisers and industry fuelled suspicion about the independence and appropriateness of the decisions made at the national and international levels.⁴

Central to this debate has been the question of whether H1N1 influenza should have been labelled a "pandemic" at all. The Council of Europe voiced serious concerns that the declaration of a pandemic became possible only after WHO changed its definition of pandemic influenza. It also expressed misgivings over WHO's decision to withhold publication of the names of its H1N1 advisory Emergency Committee.³ WHO, however, denied having changed any definitions and defended the scientific validity of its decisions, citing "numerous safeguards" for handling potential conflicts of interest.⁵

At stake in this debate are the public trust in health officials and our collective capacity to respond effectively to future disease threats. Understanding this controversy entails acknowledging that both parties are partially correct, and to resolve it we must re-evaluate how emerging threats should be defined in a world where the simple act of labelling a disease has enormous social, economic and political implications.

What sparked the controversy

Since 2003, the top of the WHO Pandemic Preparedness homepage has contained the following statement: “An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several simultaneous epidemics worldwide with enormous numbers of deaths and illness.”⁶ However, on 4 May 2009, scarcely one month before the H1N1 pandemic was declared, the web page was altered in response to a query from a *CNN* reporter.⁷ The phrase “enormous numbers of deaths and illness” had been removed and the revised web page simply read as follows: “An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity.” Months later, the Council of Europe would cite this alteration as evidence that WHO changed its definition of pandemic influenza to enable it to declare a pandemic without having to demonstrate the intensity of the disease caused by the H1N1 virus.³

A description versus a definition

Harvey Fineberg, chairman of a WHO-appointed International Health Regulations (IHR) Review Committee that evaluated WHO’s response to H1N1 influenza, identified the definition of pandemic influenza as a “critical element of our review”.⁸ In a draft report released in March, the committee faulted WHO for “inadequately dispelling confusion about the definition of a pandemic” and noted WHO’s “reluctance to acknowledge its part in allowing misunderstanding”⁹ of the web page alteration, which WHO has characterized as a change in the “description” but not in the “definition” of pandemic influenza. “It’s not a definition, but we recognize that it could be taken as such ... It was the fault of ours, confusing descriptions and definitions”,¹⁰ a WHO communications officer declared. Indeed, the Council of Europe was not alone in claiming that the “definition” had been changed.^{7,11,12}

WHO argues that this phrase – which could be more neutrally referred to as a *description–definition* – had little bearing on policy responses; a WHO press release states that it was “never part of the formal definition of a pandemic” and was never sent to Member States, but simply appeared in “a document on WHO’s website for some months”.¹³ In actuality, the *description–definition* was displayed at the top of the WHO Pandemic Preparedness home page for over six years and is consistent with the descriptions of pandemic influenza put forth in various WHO policy documents over the years.^{14–16} However, while the original *description–definition* unambiguously describes disease severity and certainly reflects general assumptions about pandemic influenza before novel H1N1 emerged, it is unrelated to the criteria WHO applied to declare H1N1 influenza a pandemic.

Definitions of pandemic phases, not pandemic influenza

In a press conference, WHO explained that “the formal definitions of pandemics by WHO can be seen in the guidelines”.⁵ This was a reference to WHO’s pandemic influenza preparedness guidelines, first developed in 1999 and revised in 2005 and 2009. However, none of these documents contains what might reasonably be considered a formal definition of pandemic influenza (Table 1), a fact that may explain why WHO has refrained from offering a quotable definition despite its repeated assurances that “the definition” was never changed.^{5,13,20} The startling and inevitable conclusion is that despite ten years of issuing guidelines for pandemic preparedness, **WHO has never formulated a formal definition of pandemic influenza.**

What WHO’s pandemic preparedness guidelines¹⁹ do contain are “pandemic phase” definitions. WHO declared a pandemic on 11 June 2009, after determining that the novel reassortant H1N1 virus was causing community-level outbreaks in at least two WHO regions, in keeping with the definition of pandemic phase 6. The declaration of phase 6 reflected wider global dissemination of H1N1, not disease severity. But unlike other numerical scales, such as the Saffir–Simpson Hurricane

Wind Scale based on five “categories”, WHO’s six-point pandemic phase determinations do not correlate with clinical severity but rather with the likelihood of disease occurrence.²¹ This point has received widespread attention and criticism.^{3,7,22,23}

“The phased approach to pandemic alert was introduced by WHO in 1999,” explained WHO Director-General Margaret Chan to the IHR Review Committee, “to allow WHO to gradually increase the level of preparedness and alert without inciting undue public alarm. In reality, it had the opposite effect”.²⁴ Indeed, WHO’s concern that declaring phase 6 could “cause an unnecessary panic”²⁵ may explain why it momentarily considered adding a severity index to its phasing system before declaring phase 6.²² WHO subsequently decided that developing a pandemic severity index was too complex.²³ However, the IHR Review Committee has called on WHO to “develop and apply measures that can be used to assess the severity of every influenza epidemic”, while noting that “assessing severity does not require altering the definition of a pandemic to depend on anything other than the degree of spread”.⁹

WHO’s defence of its decision to declare H1N1 influenza a pandemic because it met “hard to bend”, “clearly defined virological and epidemiological criteria”²⁶ overlooks the fact that these criteria changed over time. As Gross noted, under WHO’s previous (2005) guidelines the 2009 H1N1 virus would not have been classified as a pandemic influenza virus simply because it was not a new subtype.²⁷ The 2009 plan, by contrast, only required a novel “reassortant” virus (Table 1).

Statements from WHO such as “Is this a real pandemic. Here the answer is very clear: yes”⁵ suggest that pandemics are something inherently natural and obvious, out there in the world and not the subject of human deliberation, debate and changing classificatory schemes. But what would and would not be declared a pandemic depends on a host of arbitrary factors such as who is doing the declaring and the criteria applied to make such a declaration.

Bridging the gap

Had the novel 2009 H1N1 virus caused exceptionally severe disease, the extensive preparations and planning in recent years would have surely put us in a better position to respond to such a crisis, and decision-making at WHO would not have come under intense scrutiny.²⁸ But in the case of H1N1, governments mounted extraordinary and costly responses to what turned out to be mostly ordinary disease.^{29,30} This resulted in much scrutiny and controversy over the decision-making process. As future policy responses to emerging infectious diseases will not succeed without the trust and understanding of the public, officials must revise the way they think about and characterize emerging diseases.

A first step is to openly acknowledge past failures in risk assessment. The description–definition of pandemic influenza that was on WHO’s web site for so long, unchallenged and unchanged for years, is perhaps the most striking illustration that expert institutions assumed pandemics to be, in their basic nature, catastrophic events. (According to the IHR Review Committee, the description–definition was “understandable in the context of expectations about [avian influenza] H5N1”,⁹ but its appearance dates back to at least early 2003, when only 18 human cases of H5N1 were known.)⁶ But it is by no means the only example of false assumptions. A 2005 WHO preparedness document titled *Ten things you need to know about pandemic influenza*³¹ stated that “large numbers of deaths will occur” and “economic and social disruption will be great”. Statistical projections of future pandemic mortality varied widely, but even the self-described “best case scenarios”³² yielded numbers that were four to 30 times greater than the estimated number of deaths from seasonal influenza.³³ Also, over the last five years public health experts and policy-makers have helped consolidate the idea that a pandemic is of necessity a catastrophe through repeated mention of the severe 1918 pandemic “in order to rouse governments and the public”.³⁴ Descriptions of H5N1 as a pandemic candidate virus because it had met all the “requirements” only reinforced the message that a serious outbreak was inevitable (Fig. 1). The focus on 1918 and H5N1 came at the cost of preparing for possible future outbreaks similar to the 1957 and 1968 pandemics. These outbreaks, in contrast to the one in 1918, were similar to seasonal influenza and sometimes milder,^{37–39} indeed,

historical descriptions of events in 1957 and 1968 have been mixed, a fact that highlights the lack of standardized measures of severity (Table 2). Preparations for future outbreaks must take stock of all the evidence, not just the most alarming.

Second, it is time to re-examine assumptions driven by virus-centric thinking. The fact that the spread of overwhelmingly mild⁴⁷ disease by a “novel” virus such as H1N1 could meet current phase 6 criteria highlights the shortcomings of virological assumptions and their central role in defining pandemic response measures. The enduring belief is that highly transmissible novel influenza viruses can be expected to cause serious disease and even death because the population lacks immunity against them.⁴⁹ However, this view is challenged by the recent experience with H1N1 and other influenza pandemics.^{37,50–52} During the 2009 H1N1 outbreak, relatively few elderly people got sick,^{51,53,54} despite the widespread circulation of the so-called novel virus, and when they did, the symptoms were mild in most cases.

Virus-centric thinking is also at the bottom of the current practice of dichotomizing influenza into “pandemic” and “interpandemic” or “seasonal” influenza on the basis of genetic mutations in the virus. This approach, however, ignores the fact that the severity and impact of epidemics, whether caused by influenza viruses or other pathogens, occur along a spectrum and not in catastrophic versus non-catastrophic proportions. We need responses that are calibrated to the nature of the threat rather than driven by these rigid categories.¹¹ The IHR Review Committee has called for simplifying the pandemic phase structure and for plans that “emphasize a risk-based approach to enable a more flexible response to different scenarios”.⁹ However, implementing this will remain difficult as long as health officials feel compelled to “err on the side of safety”⁹ and respond to any novel influenza virus as if it were potentially a worst case scenario. We therefore need evidence-based ways to address hypothetical scenarios of non-zero probability, such as the fear – based on a very partial reading of history⁵⁵ – that novel influenza pathogens acquire increased virulence during successive “waves” of infection.

Virus-centric thinking may heavily influence pandemic influenza planning because of the considerable weight of expert opinion. Bonneux and Van Damme have argued that disease experts are not necessarily competent to judge a disease’s relative importance against competing health priorities, and “final evidence-based policy advice should be drafted by independent scientists trained in evaluation and priority setting”.⁵⁶ This advice is consistent with the views of Neustadt and Fineberg, who noted over three decades ago in their review of the 1976 swine flu affair in the United States of America that “panels tend toward ‘group think’ and over-selling, tendencies nurtured by long-standing interchanges and intimacy, as in the influenza fraternity. Other competent scientists, who do not share their group identity or vested interests, should be able to appraise the scientific logic applied to available evidence.”⁵⁷ However, the IHR Review Committee’s draft report, issued in March 2011, is less demanding. It calls for an “appropriate spectrum of expertise” to advise WHO’s Director-General but fails to specify whether this should include non-influenza experts such as general epidemiologists, general practitioners and health economists.⁹

Third, we must come to broader agreement about acceptable sources of expert advice. While the IHR Review Committee “found no evidence of malfeasance”, it urged WHO to “clarify its standards and adopt more transparent procedures for the appointment of members of expert committees”.⁹ Since the 1980s, “partnerships” between industry and academia have grown increasingly close.⁵⁸ Today, for example, both government officials and academic influenza scientists belong to the Neuraminidase Inhibitor Susceptibility Network, a group funded by GlaxoSmithKline and Roche.⁵⁹ Much work is needed to ensure that decisions are not unwittingly influenced by industrial interests.

Finally, we must remember the purpose of “pandemic preparedness”, which was fundamentally predicated on the assumption that pandemic influenza requires a different policy response than does annual, seasonal influenza. The “pandemic” label must of necessity carry a notion of severity, for otherwise the rationale behind the original policy of having “pandemic plans” distinct from ongoing public health programmes would be called into question. Insofar as these plans allow us to effectively

respond to the spread of severe infectious diseases, regardless of the pathogen that causes them, planning for hypothetical “worst case” scenarios has value. But such scenarios are rare and, when they do occur, few people will require convincing that urgent action is needed. Indeed, if we do face the threat of widespread disease causing severe symptoms, the definition of pandemic influenza will likely become moot.

Acknowledgements

I am grateful to Yuko Hara, Peter Graumann and Tom Jefferson for their perceptive observations and comments. I also wish to thank the Hugh Hampton Young Memorial Fellowship committee at MIT for their generous support of my research.

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Depuis l'an dernier, il existe une importante controverse, en particulier en Europe: l'Organisation mondiale de la Santé (OMS) a-t-elle changé ou non sa définition de la grippe pandémique en 2009, après l'identification de la grippe H1N1 originale?

Certains ont soutenu que non seulement cette définition a été modifiée, mais qu'elle l'a été dans le but de préparer la déclaration d'une pandémie. D'autres ont expliqué que la définition n'a jamais été changée et que cette allégation est dénuée de tout fondement. Ces vues polarisées ont gêné notre capacité à tirer des conclusions importantes.

Cette impasse, associée aux préoccupations sur les conflits d'intérêts potentiels et aux doutes sur la proportionnalité de la réponse à l'apparition de la grippe H1N1, a sapé la confiance publique envers les autorités sanitaires et envers notre capacité collective à répondre de manière efficace aux menaces des maladies futures.

L'OMS n'a pas modifié sa définition de la grippe pandémique pour la simple raison qu'elle **ne l'a jamais définie de manière officielle**. Alors que l'OMS a proposé de nombreuses descriptions de la grippe pandémique, elle n'a jamais élaboré une définition formelle. De plus, les critères de déclaration d'une pandémie causée par le virus H1N1 ont leur origine dans les définitions de la , et non dans une définition de la .

Le fait que, malgré dix années d'activités de préparation à une pandémie, aucune définition officielle de la grippe pandémique n'ait été formulée révèle des hypothèses sous-jacentes importantes sur la nature de cette maladie infectieuse. Les limitations des approches méritent en particulier une plus grande attention et doivent contribuer aux efforts incessants pour qui guideront la réponse aux apparitions futures de nouvelles maladies infectieuses.

Durante el pasado año, fundamentalmente en Europa, se generó una considerable polémica sobre si la Organización Mundial de la Salud (OMS) habría cambiado su definición de gripe pandémica en el año 2009, tras la identificación de la nueva gripe H1N1.

Algunos argumentan que no solo se cambió la definición, sino que se hizo para despejar el camino hacia la declaración de una pandemia. Otros aseguran que la definición nunca se cambió y que esta alegación está completamente infundada. Estos puntos de vista tan opuestos han dificultado nuestra capacidad para extraer conclusiones relevantes.

Este callejón sin salida, unido a las preocupaciones sobre los posibles conflictos de intereses y las dudas sobre la proporcionalidad de la respuesta al brote de la gripe H1N1, ha menoscabado la confianza de la población en los responsables de la salud y en nuestra capacidad colectiva para responder con eficacia a futuras amenazas de este tipo.

La OMS no cambió su definición de gripe pandémica por el simple motivo de que nunca antes había definido formalmente el concepto de gripe pandémica. Si bien la OMS ha propuesto numerosas descripciones de gripe pandémica, nunca estableció una definición formal y los criterios para la declaración de una pandemia provocada por el virus H1N1 procedían de las definiciones de , no de una definición de .

El hecho de no contar con una definición formal de gripe pandémica, a pesar del bagaje de los diez años de actividades de preparación contra las pandemias, revela importantes suposiciones subyacentes sobre la naturaleza de esta enfermedad infecciosa. En particular, las limitaciones de los enfoques reclaman una mayor atención y se debe informar sobre los esfuerzos que se realicen para que dirijan nuestra respuesta ante los futuros brotes de nuevas enfermedades infecciosas.



Daniel J Barnett.

Pandemic influenza and its definitional implications

Bull World Health Organ, 1 July 2011; 89(7): 539

doi: 10.2471/BLT.11.089078, PMID: 21734770.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3127277/>

In his thoughtful analysis, Doshi aptly describes the need for establishing greater definitional precision of “pandemic influenza” as the basis for future public health preparedness and response efforts.¹ Importantly, his assessment highlights a critical ongoing divide between competing perceptions of the very concept of a “pandemic”: namely, between “pandemic” as predominantly a function of geography and virology, versus disease severity.

This is not a minor semantic distinction, but rather one with enormous bearing on planning priorities. For instance, while the United States of America applies an all-hazards approach in its federal, state and local public health emergency readiness efforts, a major piece of 2006 national preparedness legislation was notably called the Pandemic and All-Hazards Preparedness Act.² Such explicit separation between “pandemic” and “all-hazards” in the title reflects a unique concern about a pandemic’s potential impact and severity, with implications for resource-intensive planning efforts among a myriad of stakeholders. Additionally, milder-than-feared global infectious disease events can subsequently engender a dangerous sense of complacency among frontline responders and the general public, erode trust in public health authorities and potentially reduce compliance with essential protective guidance in the face of future threats.

In keeping with these important considerations, Doshi proposes a more severity-driven approach to the declaration of an influenza pandemic. This strategy has certain merits: research suggests that people are more likely to engage in desired protective behaviours in the face of uncertain risk if they perceive the threat to be legitimately severe and relevant to them (and thus motivating), and if they view the recommended intervention as efficacious.^{3–5} This would argue for severity as the main definitional predicate for pandemic declaration, rather than geography and virology.

However, a primarily severity-based trigger for pandemic declaration would involve certain operational challenges that must be acknowledged. In the light of wide global variations in public health response infrastructure, population-specific vulnerabilities and the potentially unpredictable course of “pandemic influenza” itself (however defined), “severity” can be experienced very differently in different places and for different community segments at a given point in time.

At the international level, this variability introduces difficulties in yielding standardized severity-governed definitional criteria as the basis for pandemic influenza declaration. Geographic and virologic criteria thus remain more feasible and realistic definitional drivers, despite their admittedly inherent shortcomings from a risk perception standpoint. At the same time, however, severity indices do have considerable utility at national and subnational levels, where the above variations can and should factor directly into tailored, severity-based preparedness and response efforts for pandemic influenza.

In a broader sense, Doshi's assessment speaks powerfully to risk communication as among the greatest challenges in the international response to threats of global public health significance. In the context of pandemic influenza, explicitly establishing a consistent definition is a necessary first step that must be followed by aggressive pre-event education of the global community regarding that definition and its rationale. If we wait to ensure such clarity when the next influenza pandemic strikes, it will simply be too late.

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Kelly Heath

The classical definition of a pandemic is not elusive

Bull World Health Organ, 1 July 2011, 89 (7): 540 – 541

<http://dx.doi.org/10.2471/BLT.11.088815>

<https://apps.who.int/iris/handle/10665/270942>

Doshi argues cogently that the definition of pandemic influenza in 2009 was elusive but does not refer to the classical epidemiological definition of a pandemic.¹ A pandemic is defined as “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people”.² The classical definition includes nothing about population immunity, virology or disease severity. By this definition, pandemics can be said to occur annually in each of the temperate southern and northern hemispheres, given that seasonal epidemics cross international boundaries and affect a large number of people. However, seasonal epidemics are not considered pandemics.

A true influenza pandemic occurs when almost simultaneous transmission takes place worldwide. In the case of pandemic influenza A(H1N1), widespread transmission was documented in both hemispheres between April and September 2009. Transmission occurred early in the influenza season in the temperate southern hemisphere but out of season in the northern hemisphere. This out-of-season transmission is what characterizes an influenza pandemic, as distinct from a pandemic due to another type of virus.

Simultaneous worldwide transmission of influenza is sufficient to define an influenza pandemic and is consistent with the classical definition of “an epidemic occurring worldwide”. There is then ample opportunity to further describe the potential range of influenza pandemics in terms of transmissibility and disease severity. The emerging evidence for A(H1N1) is that transmissibility, as estimated by the effective reproduction number (R, or average number of people infected by a single infectious person) ranged from 1.2 to 1.3 for the general population but was around 1.5 in children (Kathryn Glass, Australian National University, personal communication). Some early estimates of R for pandemic influenza H1N1 2009 may have been overestimated.³

Severity, as estimated by the case fatality ratio, probably ranged from 0.01 to 0.03%.⁴⁻⁶ These values are very similar to those normally seen in the case of seasonal influenza.^{7,8} However, the number of deaths was higher in younger people, a recognized feature of previous influenza pandemics.⁹

It is tempting to surmise that the complicated pandemic definitions used by the World Health Organization (WHO) and the Centers for Disease Control and Prevention of the United States of America involved severity^{1,10} in a deliberate attempt to garner political attention and financial support for pandemic preparedness. As noted by Doshi, the perceived need for this support can be understood given concerns about influenza A(H5N1) and the severe acute respiratory syndrome (SARS). However, conflating spread and severity allowed the suggestion that 2009 A(H1N1) was not a pandemic. It was, in fact, a classical pandemic, only much less severe than many had anticipated or were prepared to acknowledge, even as the evidence accumulated.

In 2009 WHO declared a pandemic several weeks after the criteria for the definition of a classical pandemic had been met. Part of the delay was no doubt related to the nexus between the formal declaration of a pandemic and the manufacture of a pandemic-specific vaccine. If a classical pandemic definition had been used, linking the declaration to vaccine production would have been unnecessary.

This could have been done with a severity index and, depending on the availability and quality of the emerging evidence on severity, a pandemic specific vaccine may have been deemed unnecessary. Alternatively authorities may have decided to order vaccine in much smaller quantities.

The response to A(H1N1) has been justified as being precautionary, but a precautionary response should be rational and proportionate and should have reasonable chances of success. We have argued that the population-based public health responses in Australia and, by implication, elsewhere, were not likely to succeed.¹¹ Similarly, the authors of the draft report on the response to the International Health Regulations during the 2009 pandemic note that what happened during the pandemic reflected the activity of the virus and, by implication, not the interventions.¹⁰

Risk is assessed by anticipation of severity and precaution should be calibrated to risk. As Doshi has argued, we need to redefine pandemic influenza. We can then describe the potential severity range of future pandemics. Finally, we need to use evidence to assess severity early to anticipate risk.

Competing interests: None declared.

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Nick Phin

Living forwards, understanding backwards

Bull World Health Organ, 1 July 2011, 89 (7): 541 – 542

doi: 10.2471/BLT.11.089474. PMID: 21734772; PMCID: PMC3127280

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3127280/>

It has been said that pandemics are lived forwards and understood backwards. The 2009 influenza pandemic is no exception. The identification of the new influenza virus strain in the United States of America coincided with many media reports describing a very severe pneumonia affecting young Mexican adults – echoes of 1918! Hard data were sparse and quoted case fatality rates ranged from 0.3% to 2.5% of confirmed cases as late as September 2009. With the benefit of hindsight it is easy to say that the disease caused by the virus was in fact mild for most people and that this action or that action should have been taken. However, in real time with little reliable data on the effects of the virus on individuals and communities and faced with the need to make time-critical decisions, sovereign nations across the world responded differently. It is important to remember that the World Health Organization (WHO) remit is to help governments determine the level of interventions required as part of their response to threats to international health.

Unfortunately, the fact that WHO issued revised pandemic guidance just as the pandemic was starting generated confusion. Under the new guidance,¹ pandemic phases 4 to 6 differed significantly from the 2005 guideline document,² and this made communication difficult.

Individuals have made great play of the change to the wording of one sentence that was part of a 60-page document before phase 6 (the so-called start of the pandemic) was declared. In fact, in several places the WHO 2009 guidance document describes phases 5 to 6 as the pandemic period and clearly states that “during phases 5–6 (pandemic) actions shift from preparedness to response at a global level.” From this it can be argued that the pandemic was actually declared on 29 April 2009, five days before the quoted change in definition.

In the United Kingdom of Great Britain and Northern Ireland, a new national influenza pandemic strategy was published for consultation on 22 March 2011.³ This has taken on board many of the lessons learned during the 2009 pandemic. However, the strategy still recognizes the need for an initially precautionary approach, given the speed with which the virus can spread and the paucity of data that will be available at the start of a pandemic, although it states that proportionality and flexibility should guide the response as information about the virus and its effects become available. The strategy is now better adapted to the needs of the United Kingdom and is proposing a new phased response that is not linked to the WHO phases. This reflects the fact that in the United Kingdom the first cases were detected in late April 2009 and that using the WHO phases, which are global indicators of spread, proved to be unhelpful.

Peter Doshi highlights the lack of a definition of a pandemic.⁴ There is also no definition of a pandemic wave or severity, both key issues when it comes to describing the progress and impact of a pandemic. I don’t believe this reflects a lack of willingness to formulate such definitions, but rather, a lack of international consensus stemming from the absence of key data and the recognition that severity, impact and other descriptors can only be applied with certainty historically.

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Angus Nicoll

Planning for uncertainty:
a European approach to informing responses to the severity
of influenza epidemics and pandemics

Bull World Health Organ, 1 July 2011, 89 (7): 542 – 544
doi: 10.2471/BLT.11.089508. PMID: 21734773; PMCID: PMC3127281.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3127281/>

The internationally accepted definition of a pandemic is straightforward and well known: “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people”.¹ However, as Doshi reminds us, for any modern influenza pandemic, with many available powerful countermeasures, it is the detailed description that is crucial in determining proportionate responses, not the definition.²

Because of the inherent unpredictability of influenza viruses, preparing for and responding to epidemics and pandemics will always be an uncertain business.³ Annual epidemics and irregular pandemics have several important characteristics that summary terms such as *mild*, *moderate* and *severe* gloss over.² For example, even the “moderate” or “mild” pandemic of 2009 was severe in its impact on many intensive care units and in its initial pressures on primary care services.^{4,5}

Data and analyses that inform on the relevant features in the early course of pandemics and epidemics become available continuously. Initial analyses can be misleading and the pattern of infection and disease can also change over time. In the 2009 pandemic, the European Centre for Disease Prevention and Control (ECDC) used updatable published risk assessments to organize this information, comment on its implications for the response and identify the most important areas of uncertainty.⁶ This approach was based on a list of “known unknowns” of pandemics, part of a pre-planned “surveillance in a pandemic” strategy.⁷

As recommended by the report adopted by the 64th World Health Assembly,³ ECDC has further developed this approach applying it as a matrix (Table 1) to annual seasonal epidemics, starting with the 2010–2011 season.

With powerful countermeasures increasingly available – public health interventions, antivirals, vaccines and higher-level intensive care – the matrix relates more to response than to conventional measures, such as transmission and infection fatality rates. Important as these are, they are rarely available in an accurate form early on, whereas the initial impressions of impact on services often appear rapidly.

In the 2009 pandemic, the experience and reports of predominantly mild illness (but with some very severe cases) received from New York City and Melbourne, once verified, were highly informative in determining the proportionate European response.⁸ The risk assessments are undertaken by ECDC staff drawing on both European experience (from the European Influenza Surveillance Network) and whatever verifiable epidemic intelligence is available.⁹

For seasonal epidemics the information will be presented visually using internationally recognizable red, amber and green colours (Table 1 and Table 2). Red signals situations in which the evidence suggests action is justifiable, and amber signals those in which precautionary approaches may be needed. Europe has a particular advantage in that seasonal epidemics tend to progress from west to east, so that early experience and virology can be especially helpful in preparing countries for what they will experience later.¹⁰

Variants on this approach have been used since the 2007–08 season, beginning with the appearance of oseltamivir-resistant viruses in Norway (Table 3). Though concerned with responses, the severity matrix cannot prescribe actions. The ECDC's mandate is to offer scientific information, guidance and options, not to make recommendations. Decisions on risk management are made by its individual Member States and collectively by European Union bodies, such as the Health Security Committee. Capacity, preparation and disease intensity vary across countries; so what can be coped with in one setting may be stressful in another. Hence, the severity matrix will alert Member States as to what *may* give them problems and will suggest options for action.

One of the general lessons learned from the pandemic, as indicated by evaluations undertaken in Europe (listed on the ECDC web site), is that interventions that were not exercised beforehand did not work well. This explains why the ECDC uses interpandemic influenza as a practice ground for pandemic preparation, although it also merits public health action in its own right.^{3,11}

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Issues around the definitions and severity of pandemic influenza

ECDC comment, 17 August 2011

<https://www.ecdc.europa.eu/en/news-events/issues-around-definitions-and-severity-pandemic-influenza>

This collection of article is intended to clarify the issues that arose, during the 2009 pandemic around definitions of the pandemic term, both in a theoretical and practical way. This Public Health Development from ECDC describes some of the background and complex events in approximately chronological order.

Bulletin of the World Health Organization 2011; 89: Charles Penn (editorial) Future perfect Improving preparedness through the experiences of the influenza A (H1N1) 2009 pandemic (p 470) Roundtable debating the issues. Peter Doshi. The elusive definition of pandemic influenza pp 532-538. Daniel J Barnett. Pandemic influenza and its definitional implications (p 539), Luc Bonneux & Wim Van Damme. Health is more than influenza (pp 539–540). Heath Kelly. The classical definition of a pandemic is not elusive (pp 540–541). Nick Phin. Living forwards, understanding backwards (pp 541–542), and Angus Nicoll. Planning for uncertainty: a European approach to informing responses to the severity of influenza epidemics and pandemics (pp 542–544).

This collection of article is intended to clarify the issues that arose, during the 2009 pandemic around definitions of the pandemic term, both in a theoretical and practical way. This Public Health Development from ECDC describes some of the background and complex events in approximately chronological order. In 2009, governments throughout the world mounted responses to the 2009 A(H1N1) pandemic. These efforts were on the premise that pandemic and seasonal influenza potentially required different management and responses.(1) The Director General of the World Health Organization (WHO), followed the actions dictated by the International Health Regulations and acted on the advice of a global emergency committee selected from experts nominated by member states, declared the confirmed outbreak of novel A(H1N1)2009 influenza to be a ‘pandemic’ in June 2009.(1) As indeed it was according to the long standing definition in the Dictionary of Epidemiology “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people” .

Later some persons, mostly new to influenza issues, suggested that the declaration of a ‘pandemic’ was only because WHO had changed its own definition of a pandemic and that this was bowing to commercial pressures.(1) Concern was increased by WHO’s decision to withhold publication of the names of its H1N1 advisory Emergency Committee until the pandemic was declared over in August 2010. In response, WHO denied having changed any definitions and defended the scientific validity of its decisions, citing ‘numerous safeguards’ for handling potential conflicts of interest. Doshi suggests in his article that both parties are partially correct, and to resolve it he proposes a reevaluation of the way in which emerging threats should be defined, taking into account that the simple act of labelling a disease can have enormous social, economic and political implications. Doshi’s article indicates how easy it was for people to confuse description with definition of a pandemic. WHO’s Pandemic Preparedness homepage had contained statements about how an influenza pandemic could resulting in enormous numbers of deaths and illness and that less informed readers had then assumed that therefore all pandemics would result in such mortality. This process of perhaps over-

stating the risk has been described as risk advocacy by Thomas Abraham.(3) Dr Fineberg, independent chairman of the WHO-appointed International Health Regulations (IHR) Review Committee which evaluated WHO's response to the 2009 influenza A(H1N1) pandemic – identified the 'definition of pandemic influenza' as a critical element in his committee's review.

In the final report of the review released on the 5th May 2011, the Fineberg committee faulted WHO for 'inadequately dispelling confusion about the definition of a pandemic' and noted WHO's 'reluctance to acknowledge its part in allowing misunderstanding'. Doshi also notes that none of the influenza preparedness guidelines - first developed in 1999 and revised in 2005 and 2009 - contain what could be considered a formal WHO definition of a pandemic and that WHO's six-point pandemic phase determinations did not correlate with clinical severity but rather the international spread and the risk of disease occurrence. The Fineberg report recommends that WHO 'develop and apply measures that can be used to assess the severity of every influenza epidemic', while noting that 'assessing severity does not require altering the definition of a pandemic to depend on anything other than the degree of spread' (1). Finally the article by ECDC indicates a way this is being done in Europe.



Emergency Preparedness - Pandemic Illness

Mount Pleasant, South Carolina, 13 September 2011

<https://www.tompsc.com/FAQ.aspx?QID=293>

What is a flu pandemic?

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in epidemics worldwide with **enormous numbers of deaths and illness**. With the increase in global transport, as well as urbanization and overcrowded conditions, epidemics due the new influenza virus are likely to quickly take hold around the world.

Outbreaks of influenza in animals, especially when happening simultaneously with annual outbreaks of seasonal influenza in humans, increase the chances of a pandemic, through the merging of animal and human influenza viruses. During the last few years, the world has faced several threats with pandemic potential, making the occurrence of the next pandemic a matter of time.

Emergency Preparedness - Pandemic Illness

[View All FAQs...](#)

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2. What should I know about the 2011-2012 flu season?

This page provides information about the 2011-2012 influenza season, including information about the season's vaccines, vaccination recommendations and disease activity.

3. What can I do to prevent catching the flu?

Flu is a serious contagious disease that can lead to hospitalization and even death. CDC urges you to take the following actions to protect yourself and others from influenza (the flu).



Town of Mount Pleasant, SC

<https://www.tompsc.com> > FAQ

FAQs • Mount Pleasant, SC • CivicEngage

13 Sept 2011 — ... [Emergency Preparedness - Extreme Heat](#) · [Emergency Preparedness - Flooding](#) · **[Emergency Preparedness - Pandemic Illness](#)** · [Emergency Preparedness - ...](#)

PANDEMICS

Mary K. Pratt

Pandemics

Edina, Minnesota: ABDO Pub., 2011, p. 16-21

https://archive.org/details/isbn_9781617147760/page/16/mode/1up

What is a Pandemic?

Even doctors, medical institutions, and government health agencies have no single, clear explanation of the word pandemic. “There is a lot of misinformation in the medical literature, and it is really quite hard to figure out what is and what is not a pandemic,” said Dr. David M. Morens, an epidemiologist at the National Institute of Allergy and Infectious Diseases.

In general, a pandemic is declared when many people in several different regions of the world have the same disease around the same time. A pandemic is a larger version of an epidemic, which happens when a communicable disease sickens many people around the same time in a small area. An epidemic that spreads around a large part of the world or sickens a high percentage of the population is a pandemic.

However, a disease does not have to be present in every country – or even most countries – to be considered a pandemic. The disease does not even have to be particularly deadly, either.

Controversy over definition

It is important that the definition created by the WHO be accurate because it affects how governments, institutions, health officials, and the public react to an outbreak.

The WHO uses a six-point system, which was created in 2005, to alert governments around the world to the severity of a potential pandemic. The system describes how widespread an infectious disease has become. In Phase 1, the disease being monitored occurs only in animals, and humans are not affected. As humans become infected and the disease becomes more widespread, it becomes a greater threat. By Phase 6, the disease has caused outbreaks in several countries and in multiple regions of the world. It has become a pandemic disease.

But some criticized WHO's definition of an influenza pandemic as too broad. According to Dr. Peter Gross, an infectious disease specialist at the Hackensack University Medical Center in New Jersey, under the WHO definition, some seasonal influenza viruses could be incorrectly classified as pandemics. Seasonal influenza occurs every year. Although the strain changes each year, medical professionals are prepared for the disease, and vaccines are ready in advance to prevent infection.

Also, WHO's system does not take into account the potential mortality rate of the pandemic disease. Because the H1N1 virus was less deadly than other pandemic diseases, some governments believed WHO's system created unnecessary panic. Many people believed the H1N1 virus was incredibly dangerous. Some parents were afraid to send their children to school. Others were demanding that a vaccine be prepared immediately. Many governments believe that the severity of the illness should be considered, not just how widespread the infection is.

Redefining Panpemic

As the H1N1 virus spread throughout 2009, ‘WHO officials found it necessary to revisit how they defined an influenza pandemic. For many years, the WHO defined an influenza pandemic simply as causing “[enormous numbers of deaths and illness](#).” But according to its Web site at the end of 2009,

a pandemic is a worldwide epidemic of a disease. An influenza pandemic may occur when a new influenza virus appears against which the human population has no immunity. . . . Pandemics can be either mild or severe in the illness and death they cause, and the severity of a pandemic can change over the course of that pandemic.

It is important for the WHO to have an accurate and effective definition of a pandemic. The WHO is considered an authority on global health issues. Its recommendations shape the response of local governments in fighting outbreaks of disease. Governments and health officials must react quickly if they are to control a potential threat to public health. They must research treatments, procure medicine, train medical personnel about the disease, and design systems for responding to local outbreaks. If the pandemic illness is potentially deadly, the response will need to be even more aggressive.

...

James (Jim) Chin

An Epidemiological Analysis of the 2009 H1N1 Swine Influenza “Pandemic”

University of Pittsburgh, Supercourse Lecture, 7 June 2012, p. 12
<https://sites.pitt.edu/~super1/lecture/lec47451/index.htm>

An Epidemiological Analysis of the 2009 H1N1 Swine Influenza “Pandemic”

James (Jim) Chin, MD, MPH
Public Health Epidemiologist (retired)

Formerly

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California State Department of Health Services, 1971-1987

Chief, Surveillance, Forecasting, and Impact Assessment Unit,
Global Programme on AIDS, WHO, Geneva, 1987-1992

Clinical Professor of Epidemiology,
School of Public Health, UC Berkeley, 1992-2009

dr.jimchin@gmail.com

WHO’s 2005 Definition of an Influenza Pandemic

“An influenza pandemic occurs
when a new influenza virus appears
against which the human population
has no immunity,
resulting in several, simultaneous
epidemics worldwide
with enormous numbers of
deaths and illness.”*

*[The last underlined phrase was deleted by WHO on May 4, 2009]

Epidemiology

An Introduction

Kenneth J. Rothman

Epidemiology: an Introduction

2nd ed, New York, NY: Oxford University Press, 2012, p. 112.

What Makes a Pandemic?

In Chapter 4, an epidemic was defined as an unusually high occurrence of disease. A *pandemic* is defined in the *Dictionary of Epidemiology*² as "an epidemic occurring worldwide or over a very wide area, crossing boundaries of several countries and usually affecting a large number of people."

The World Health Organization (WHO) had a more specific description that it had used for *pandemic influenza*: An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide *with enormous numbers of deaths and illness*."

Just before WHO announced that the H1N1 influenza of 2009 (swine flu) had become pandemic, it changed its description of pandemic by *dropping the phrase* "with enormous numbers of deaths and illness."

This new description of pandemic was more consistent with the definition quoted from the *Dictionary of Epidemiology*.² It also allowed the WHO to declare a pandemic for a disease that did not have extraordinary mortality and morbidity.

The announcement of the pandemic in 2009 led to criticism that the declaration was motivated by ties between the WHO and the pharmaceutical industry, a claim that the WHO denied?

WHAT MAKES A PANDEMIC?

In Chapter 4, an epidemic was defined as an unusually high occurrence of disease. A *pandemic* is defined in the *Dictionary of Epidemiology*² as "an epidemic occurring worldwide or over a very wide area, crossing boundaries of several countries and usually affecting a large number of people." The World Health Organization (WHO) had a more specific description that it had used for *pandemic influenza*: "An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several, simultaneous epidemics worldwide with enormous numbers of deaths and illness." Just before WHO announced that the H1N1 influenza of 2009 (swine flu) had become pandemic, it changed its description of pandemic by dropping the phrase "with enormous numbers of deaths and illness." This new description of pandemic was more consistent with the definition quoted from the *Dictionary of Epidemiology*.² It also allowed the WHO to declare a pandemic for a disease that did not have extraordinary mortality and morbidity. The announcement of the pandemic in 2009 led to criticism that the declaration was motivated by ties between the WHO and the pharmaceutical industry, a claim that the WHO denied.³⁻⁵

Pandemics

Jacqueline Langwith, Book Editor

Jacqueline Langwith, Editor

Pandemics: The WHO Wanted a Pandemic

Detroit, New York, San Francisco, etc., Greenhaven Press, 2012, p. 74-75.

The WHO Wanted a Pandemic

In fact, there was never a need for luck or alarm. Just two days after Fukuda's Spanish flu comparison. I wrote of a "porcine panic" I went on to ffilterate in any more articles that flu fears were being overblown: When the WHO made the pandemic official, for example, I noted that swine flu had killed only 144 people worldwide in 11 weeks, fewer than die *each day* from ordinary flu. If I knew the outbreak was being exaggerated, than the WHO and others knew or should have known.

The previous definition of influenza pandemic required "several, simultaneous epidemics worldwide with enormous numbers of deaths and illness" But the agency wanted an HINT pandemic – badly. It had lost credibility for sounding the alarm for five years about H5N1 avian flu described as a "when, not if pandemic that could kill hundreds of millions.

So when swine flu trotted in, the WHO rewrote its definiion to say pandemics "can be either mild or severe." That renders the term meaninglew, because seasonal flu always causes "simultaneous epidemics worldwide."

This gave license to others to treat swine flu as a pandemic in the commonly accepted sense of the term. Thu, last August [2009], the President's Council of Advisors on Science and Technology forecast a "plausible" scenario of 30,000 to 90,000 U.S. deaths. In the *Washington Post*, author John Barry predicted more than 89,000 American deaths.

This was obviously nonsense. We already had information from all over the world showing swine flu to be vastly milder than the seasonal variety. A New York City estimate suggested that seasonal flu was 10 to 40 times deadlier than swine flu. In Australia, with the epidemic already well under may and no vaccine generally available, people were dying at a lower rate than nomul.

The World Health Organization Exaggerated the 2009 Swine Flu Pandemic

The previous definition of influenza pandemic required "several, simultaneous epidemics worldwide with enormous numbers of deaths and illness." But the agency wanted an H1N1 pandemic—badly. It had lost credibility for sounding the alarm for five years about H5N1 avian flu described as a "when, not if" pandemic that could kill hundreds of millions.

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Søren Ventegodt

Why the Corruption of the World Health Organization (WHO) is the Biggest Threat to the World's Public Health of Our Time

J Integrative Med Ther. January 2015, 2(1): 1-5

<https://www.avensonline.org/fulltextarticles/JIMT-2378-1343-02-0004.html>

Abstract

In the scientific community it is generally accepted that metaanalyses are more accurate than single studies and independent studies more trustworthy than industrial studies. It is therefore understandable that Cochrane reviews, meta-analyses based on rigid protocol and independent origin, have the highest quality in medical research. It is therefore unfortunate that Cochrane reviews seems systematically to conflict with the information and recommendations from the World Health Organization (WHO).

A number of the drugs and vaccines recommended by WHO, especially the drugs used in psychiatry, are in Cochrane reviews found to be harmful and without significant clinical effect. Since whose recommendations are followed by many people in the member states, it could indeed lead to patients getting the wrong medication and many patients have severe adverse effects, because of these drugs.

To solve this serious public health problem it is recommended to revise the WHO-system, which in fact has been proven weak to the interests of the pharmaceutical industry. We therefore believe that the WHO's recommendations regarding medicine in its "list of essential medicines" and other drug directories are biased and not reliable as a source of information on medicine

...

Many drugs listed in the WHO drug directories, like "WHO's model list of essential medicines" [6], have no value as medicine according to Cochrane reviews, since the drugs are dangerous, often harmful, and without significant beneficial effects for the patient. You can even say that the lack of effect and the danger of the drugs are well documented!

...

It turned out to be a false alarm and the Swine Flu epidemic in 2009 did not cause the many cases of deaths as first expected [12,13,15-25]. Slowly it became known that the WHO actually knew this already BEFORE the director-general Margaret Chan declared the pandemic. This can be seen by the fact that WHO changed the definition of a "pandemic" from meaning "[millions of deaths](#)" to mean a non-dangerous infection that spreads worldwide only one month before the WHO's declaration of the pandemic [1,2,14-25,28,29].

L'OBS

Gérard Bapt

Grippe A: comment l'OMS a dramatisé les effets de la pandémie

L'OBS, 10 novembre 2016 à 10h34

<https://www.nouvelobs.com/rue89/rue89-nos-vies-connectees/20100603.RUE6852/grippe-a-comment-l-oms-a-dramatise-les-effets-de-la-pandemie.html>

7,4 millions de décès annoncés. 18 114 dénombrés, au final, depuis avril 2009. Alors que l'Organisation mondiale de la santé (OMS) s'apprête à lever l'alerte sur la grippe A, sa gestion de la pandémie est attaquée. Et pour cause: [en retirant le critère de mortalité du phasage de la mise en œuvre de sa stratégie de gestion face à tout virus nouveau](#), l'OMS nous condamne à l'«alerte sanitaire mondiale» à perpétuité.

Comment l'Organisation mondiale de la santé a-t-elle élaboré sa stratégie de réponse aux pandémies grippales que l'on observe depuis près d'un siècle ? Sur quelle définition précise et reconnue de l'épidémie à combattre ?

En modifiant sa définition d'une «pandémie de grippe»

En surfant sur le site de l'OMS, j'ai remarqué que l'organisation avait changé sa définition de la notion de pandémie virale.

Avant le 4 mai 2009, la définition d'une pandémie virale était la suivante:

«Une pandémie de grippe se produit lorsque apparaît un nouveau sous-type de virus dont personne n'est à l'abri. Plusieurs épidémies peuvent se déclarer simultanément dans le monde, provoquant un grand nombre de cas et de décès».

Le site renvoie à la «check-list» qui précise des recommandations aux Etats et dit notamment que: «même dans l'hypothèse la plus modérée, on dénombrera quelques 7,4 millions de décès dans le monde, dans un laps de temps très bref...».

En déclenchant l'alerte maximale très tôt

Après le 4 mai 2009, sur le même site, les notions de morbidité et de mortalité ont disparu. Le 11 juin, Margaret Chan, directrice général de l'OMS déclenche la phase 6 de la pandémie grippale, la plus haute, alors que 144 décès sont attribués à la grippe A dans le monde.

Cette déclaration n'aurait pu être faite sans ce changement de définition, excluant la prise en considération de la mortalité. Le Center of Disease Control américain estimait dès le 23 avril 2009 que ce virus ferait beaucoup moins de morts qu'une grippe saisonnière.

Mais les mêmes prévisions en nombre de morts apparaissent toujours dans la «check-list» des recommandations aux Etats, ainsi déconnectée de la définition de la pandémie et entretenant le catastrophisme.

En changeant les règles de l'expertise du virus

Le 24 avril 2009, jour de « l'alerte sanitaire mondiale » proclamée par l'OMS, quinze cas de grippe étaient attribués au H1N1 type A. Richard Besser, le directeur du Center of Disease Control déclarait:

=> <https://www.cdc.gov/media/transcripts/2009/t090424.htm>

«Nous allons expertiser le nouveau virus selon trois dimensions: Est-il nouveau pour la population? Cause-t-il des affect ions sévères? Est-il aisément transmissible?»

Las, quelques jours plus tard, le 4 mai, les bases sur lesquelles l'expertise devait être conduite allaient être bouleversées: la notion de sévérité de la pandémie disparaissait de la définition officielle de la pandémie. On venait de changer les règles du jeu en cours de partie!

C'est au bout d'une longue maturation que l'OMS en est arrivée à ce changement, prenant prétexte du nouveau règlement sanitaire international. Les efforts des firmes productrices de vaccins et de certains experts n'y ont toutefois pas manqué !

En partant des prévisions les plus graves...

En témoigne l'examen des [comptes rendus](#) de la réunion regroupant OMS, agences et firmes à Genève les 11 et 12 novembre 2004, de même, [celui de l'assemblée de l'ESWI](#) (European Scientists Fighting Influenza), présidée par le très contesté [Professeur Osterhaus](#), réunie en janvier 2009 à Bruxelles.

A partir de mai 2009, l'OMS continue à renvoyer à des recommandations faisant appel à des prévisions évoquant 7,4 millions de décès. Ces prévisions seront relayées dans les différents pays : en France, le Professeur Flahaut affiche, le 12 mai 2009, la « prévision modérée » de 30000 décès.

Beaucoup plus tard, le très officiel [Institut de Veille Sanitaire \(INVS\)](#) livre dans son avis du 28 septembre 2009 des fourchettes d'évaluation actualisées, allant de 6400 décès dans le scénario le plus optimiste, à 96 000 décès dans le plus pessimiste, avec 640 à 4800 décès pour les enfants de 0 à 4 ans...

Malgré les données du terrain

A cette date étaient pourtant connues de nombreuses données provenant de pays ayant connu le pic pandémique de grippe A. On dénombrait ainsi le 26 août 439 décès en Argentine, 128 au Chili, 34 en Uruguay, 132 en Australie, 522 aux USA... beaucoup moins que pour une grippe saisonnière !

Le caractère modéré («mild») de la pandémie était souligné, de même que les publics vulnérables désignés (femmes enceintes, pathologies associées...).

Certains experts et chercheurs (par exemple du très prestigieux [Massachussets Institute of Technology](#)) avaient aussi indiqué que des prévisions trop pessimistes sur une pandémie avaient un grand impact sur l'expérience sociale en matière de santé publique.

Des stratégies de réponse aux pandémies uniquement basées sur des prévisions catastrophistes ne peuvent qu'éroder la confiance des populations et des professionnels de santé, d'autant plus que la communication publique y contribue fortement.

Thierry Saussez, responsable de la communication gouvernementale, n'a-t-il pas indiqué devant la commission d'enquête de l'Assemblée nationale que, face à une menace, il fallait partir des prévisions les plus graves ? L'INVS les a formulées !



The World Foundation for Natural Science
The New World Franciscan Scientific Endeavour of The New World Church
Restoring and Healing the World through Responsibility and Commitment in accord with Natural and Divine Law!

Вакцины против SARS-CoV-2: должен ли ты получать по одной, каждый год?

Natural Science, 2 декабря, 2020

<https://www.naturalscience.org/ru/news/2020/12/%D0%B2%D0%B0%D0%BA%D1%86%D0%B8%D0%BD%D1%8B-%D0%BF%D1%80%D0%BE%D1%82%D0%B8%D0%B2-sars-cov-2-%D0%B4%D0%BE%D0%BB%D0%B6%D0%B5%D0%BD-%D0%BB%D0%B8-%D1%82%D1%8B-%D0%BF%D0%BE%D0%BB%D1%83%D1%87%D0%B0%D1%82/>

...

Так действительно ли это пандемия – нечто, чего стоит бояться?

На ум приходит поддельная пандемия свиного гриппа H1N1 в 2009 году. ВОЗ изменила определение термина ‘пандемия’ за месяц до объявления пандемии гриппа H1N1.

Определение ВОЗ до внесения изменений гласило: “Пандемия гриппа возникает, когда появляется новый вирус гриппа, против которого человеческое население не имеет иммунитета, что приводит к нескольким одновременным эпидемиям во всем мире *с огромным числом смертей и болезней*”.

За месяц до объявления H1N1 пандемией определение ВОЗ было изменено на следующее: “Пандемия гриппа может произойти, когда появляется новый вирус гриппа, против которого человеческое население не имеет иммунитета”.

Статья ВОЗ продолжает: “Несколько месяцев спустя Совет Европы будет ссылаться на это изменение как на доказательство того, что ВОЗ изменила свое определение пандемии гриппа, чтобы можно было объявить пандемию без необходимости демонстрации интенсивности заболевания, вызванного вирусом H1N1”.²⁷

Поддельная пандемия не означает поддельный вирус, но это означает, что все меры по борьбе с чем-то не более опасным, чем сезонный грипп, несоразмерны. На ум приходят также спящие контракты с фармацевтическими компаниями.

Возможно, стоит задуматься, сколько денег могут заработать фармацевтические компании, сколько на этом могут заработать их спонсоры, такие как Фонд Билла и Мелинды Гейтс? И к каким крайним мерам они могли подтолкнуть правительства для достижения своих целей? Каждому человеку на планете сделать прививку? Билл Гейтс сам сказал: “Пока мы не вакцинируем всех во всем мире, мы не сможем вернуться к нормальному состоянию”.²⁸

...

Литература

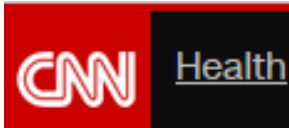
²⁷ <https://www.who.int/bulletin/volumes/89/7/11-086173/en/>

²⁸ Dr Mercola (May 21 2020) Как Билл Гейтс Монополизировал Глобальное Здравоохранение, <https://articles.mercola.com/sites/articles/archive/2020/05/21/bill-gates-foundation-global-health.aspx> Посмотрите видео. Гейтс сам это говорит.

Part 4

NATALIE BOUDOU-JACOBS





Elizabeth Cohen

When a pandemic isn't a pandemic

CNN, Health, May 4 2009; Updated 22:42 GMT (06:42 HKT)
<https://edition.cnn.com/2009/HEALTH/05/04/swine.flu.pandemic/index.html>

Atlanta, Georgia (CNN) – When the World Health Organization raised its influenza pandemic alert from a Phase 4 to a Phase 5 last week, there was a bit of a gasp heard round the world.

News about the pandemic sent people to line up at a mobile health clinic in Mexico City. After all, Phase 5 "is a strong signal that a pandemic is imminent," according to WHO.

"All countries should immediately activate their pandemic preparedness plans," the organization's director-general, Dr. Margaret Chan, said Wednesday. "After all, it really is all of humanity that is under threat during a pandemic."

But the word "pandemic" isn't quite as scary as it sounds, explained **David Ozonoff**, professor of environmental health at the Boston University School of Public Health.

"When people hear the words 'pandemic' and 'flu,' the first thing that comes to mind is 1918, which was a real horror show," Ozonoff said, referring to the flu pandemic that killed some 50 million people 91 years ago. But you can have a pandemic without a large number of deaths, he said. "The word pandemic refers to how widely dispersed a disease is, not to how severe the disease is," he said.

Confusion about the meaning of "pandemic" is understandable, Ozonoff said, considering the definition of the word is "not set in stone."

Until Monday morning, the WHO *had a definition* on its Web site saying that a pandemic flu causes "*enormous numbers of deaths and illness*." After a CNN reporter pointed this out, WHO spokeswoman *Natalie Boudou*¹ called back to say the *definition was in error* and had been pulled from the WHO Web site.

"It was a mistake, and we apologize for the confusion," she said. "(That definition) was put up a while ago and paints a rather bleak picture and could be very scary."

The correct definition is that "pandemic" indicates outbreaks in at least two of the regions into which WHO divides the world, but has nothing to do with the severity of the illnesses or the number of deaths.

Based on lessons from the past, "influenza may cause mild disease in affluent countries, but more severe disease, with higher mortality, in developing countries," Chan said at Wednesday's news conference.

There have been three influenza pandemics in this century, said Andrew Pekosz, associate professor of microbiology and immunology at Johns Hopkins University's Bloomberg School of Public Health. The other two, in 1957 and 1968, also were caused by new viruses to which no one had immunity, but didn't cause nearly the number of deaths as the one in 1918.

"I think people need to be reminded that this current H1N1 outbreak is going to resemble much more the pandemics in 1957 and 1968, where there was an increase in deaths from other years, but nothing like the millions of deaths we saw in 1918," Pekosz said.

¹ Natalie Boudou-Jacobs, Communications Officer, WHO Geneva, email: boudoun@who.int See: <https://web.archive.org/web/20130617215844/http://www.who.int/mediacentre/news/notes/2008/np11/es/>

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Communications Officer, Geneva, WHO, 27 October 2008

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BEIJING TODAY

Crackdown on tourist organ transplants

Beijing Today, 20 February 2009, N 403, CN 11-0120, p. 5

Crackdown on tourist organ transplants

The phrase "transplant tour" re-emerged after the Ministry of Health announced an investigation on 17 transplants for Japanese tourists. The ministry said Tuesday that there will be a crackdown on tourist organ transplants.

Foreigners visiting China will no longer be allowed or will find it harder to receive organ transplants, according to the Ministry of Health.

"Due to the lack of organ donors, shortage of organs is a problem in all countries, not just China. Priority must be given to domestic patients in urgent need of an operation," Deputy Minister of Health Huang Jiefu said.

"If we start allowing organ transplants for tourists, the existing order will be disturbed," he said.

Huang said the country will investigate whether 17 Japanese tourists have indeed received illegal organ transplants after the country banned the trade in human organs in May 2007.

China will punish the doctors and medical institutions involved, Huang said, adding that the country plans to develop a national registration system regulating organ transplants at all medical facilities.

The ministry's investigation comes after a report by the Kyodo News agency in Japan that said the 17 tourists spent around 594,000 yuan each for the operation. The price reportedly included travel, accommodations and 30 days of recovery at a hospital in southern Guangdong Province.

At the request of the hospital, some of the Japanese patients registered under Chinese names, the Kyodo report said. Most of the patients were between 50 and 65 years old.

A press officer at the Japanese Embassy said they did not have any information about the transplants. (Agencies)

Official stance: strong opposition to transplant tours

"China strongly opposes organ transplant tourism," the Ministry of Health said in a statement on its Web site, adding that the hospitals and medical personnel "who carried out the organ transplants against the rules will be severely dealt with according to the law."

"The country has banned all transplants for foreigners – so-called 'organ tourists' – because an estimated 1.5 million Chinese nationals are on the waiting lists for transplants, the ministry said.

Currently, there are 160 medical institutions in China licensed to perform transplants, and then only with approval from provincial health departments, Xinhua news agency said.

The ministry said the country has been making efforts to better regulate organ transplants. In late 2007, medical officials agreed not to transplant organs from prisoners or others in custody, except to members of their immediate families.

Earlier in 2007, the State Council issued regulations making it illegal to harvest human organs without government permission. The rules also included a ban on the sale of human organs for profit and on donations by people under 18. (Agencies)



Statistics show that transplant tours to China are on the rise. CFP Photo

Expert: Transplant tourism in developing countries on rise

By Huang Daohen

Because the supply of human organs cannot meet the demand for them, "transplant tours" to developing countries are on the rise, according to a report by the World Health Organization (WHO).

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WHO is concerned about the trend, in which people in developing nations have been persuaded to sell body parts to strangers, mostly through a broker, [Natalie Boudou-Jacobs](#), an official with the UN agency's health information and research unit, said.

The practice has increased over the past decade, [Boudou-Jacobs](#) said in an email statement. "We believe 5 to 10 percent of all kidneys transplanted were transplanted in this setting," she said.

Once considered an urban myth, [Boudou-Jacobs](#) said the black market in organ trade has grown into a global concern. Organ trafficking is generally conducted by a criminal network connecting organ buyers, sellers and "broker friendly" hospitals.

WHO estimates 14,000 of the 70,000 kidneys transplanted worldwide each year are from the black market.

[Boudou-Jacobs](#) said patients from Western countries who are desperately in

Expert: Transplant tourism in developing countries on rise

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need of transplants make up as much as 40 percent of the underground market. Brokers regularly arrange transplants within weeks rather than the months or years it takes in the West.

In some developing countries, Pakistan for example, 40 to 50 percent of the residents of some villages have only one kidney because they have sold the other to a wealthy individual, likely from another country, [Boudou-Jacobs](#) said.

In Western countries, kidney transplant packages are advertised on the Internet, ranging from US \$12,000 (82,000 yuan) to US \$20,000. This includes the organ and seven days of hospitalization in the country of surgery, [Boudou-Jacobs](#) said. "It would be far more expensive to have it done in North America."

There are roughly 100,000 people waiting for organ transplants in the US alone, with a waiting time of up to three years.

As for China, [Boudou-Jacobs](#) said there is a flourishing underground trade in organ sales and transplants, especially for Japanese and South Korean patients. But the situation will improve with government enforcement of regulations, he said.



Ana Margarita García Reyes, Ana Gabriela Alberty Murillo, Angie Nicole Avila Matute, et al.

Discrepancias entre el diagnóstico Clínico y Anatomo-Patológico en el Hospital Escuela Universitario De Honduras.

Revista Científica Ciencia Médica, 2016, 19(2): 20-26.

<https://www.rccm-umss.com/index.php/revistacientificacienciamedica/article/view/197>

Resumen

La calidad diagnóstica es el resultado de integrar el conocimiento médico y reconocimiento de los errores clínicos, se alcanza únicamente con la identificación de las causas de muerte; es la correlación clínico patológica la herramienta principal para dicha acción. El objetivo general de la investigación fue determinar la discrepancia clínico-patológica y su relación con otras variables en las autopsias realizadas en la institución. Se revisaron 159 protocolos de autopsia del período comprendido entre enero 2012 y junio 2016, elaborados por el Servicio de Patología del Hospital Escuela Universitario de Tegucigalpa, Honduras. Se excluyeron 36 por no cumplir los criterios de inclusión. Se utilizaron la CIE-10 y la clasificación de Goldman et al. para clasificar las patologías y establecer las discrepancias diagnósticas, respectivamente. El sexo predominante fue el femenino (2,96:1), la edad media fue de 38 años; prevalecieron los diagnósticos de embarazo/parto/ puerperio y enfermedades infecciosas y parasitarias. Concluimos que en 46% de los casos existe discrepancia diagnóstica y la glomerulonefritis fue la principal causa de error, seguida de bronconeumonía. Se recomienda estandarizar el protocolo de autopsias y promover sesiones clínico-patológicas periódicas e integrales.

Abstract

Diagnostic quality is the result of the integration of medical knowledge and recognition of clinical error, achieved only by identifying the cause of death; clinical pathological correlation is the primary tool for this action. The overall objective of this research was to determine clinical pathological discrepancy and its relationship with other variables within the autopsies performed at the institution. 159 autopsy protocols, elaborated by the Department of Pathology of Hospital Escuela Universitario in Tegucigalpa, Honduras, from January 2012 to June 2016, were reviewed. 36 were excluded for not meeting the inclusion criteria. ICD-10 and Goldman et al. modified by Battle criteria were used to classify diseases and establish diagnostic discrepancies, respectively. The majority of patients were female (2.96:1), the mean age was 38 years old; diagnoses of pregnancy/birth/puerperium and infectious and parasitic diseases prevailed. We conclude that diagnostic discrepancies exist in 46% of all cases and glomerulonephritis was the leading cause of error, followed by bronchopneumonia. It is recommended that autopsy protocols be standardized, and integrative clinical pathological sessions are promoted and integral.

...

Según la OMS, las principales causas de defunción en el mundo entre 2000-2012 fueron cardiopatía isquémica, los accidentes cerebrovasculares, infecciones de vías respiratorias inferiores y EPOC; estas concuerdan con estudios en Sri Lanka y España.^{17,23,24}

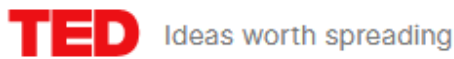
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De acuerdo a la edad, la bibliografía establece que las causas externas inciden en la población más joven y los tumores en los mayores.^{2, 3, 17, 19, 21}

References

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17. OMS | Estado de la salud en el mundo: nuevo estudio sobre la carga mundial de morbilidad. [Internet]. OMS. Ginebra: Boudou-Jacobs N.; 2008 [consultado 1 Octubre 2016]. Disponible en: <http://www.who.int/mediacentre/news/notes/2008/np11/es/> => <https://web.archive.org/web/20141011061809/http://www.who.int/mediacentre/news/notes/2008/np11/es/>



Natalie Boudou

The power of fear in a changing world

YouTube, 27 March 2023

https://www.ted.com/talks/natalie_boudou_the_power_of_fear_in_a_changing_world



Natalie Boudou

HumanForce: The power of emotions in a changing workplace

Amazon.co.uk, 4 April 2023

https://www.amazon.co.uk/Natalie-Boudou/e/B0BYS4ZT7H/ref=zg_bsr_26247944031_bl_sccl_1/000-0000000-0000000

About Natalie Boudou

[Natalie](#) has over 30 years' experience in the corporate world working in senior management roles for the private sector and [the United Nations](#). Today she is CEO and Founder of Human Force an international consultancy working with organisations to build healthy and resilient cultures that drive performance.

Natalie Boudou-Jacobs

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"who geneva telephone": examples and translations in context

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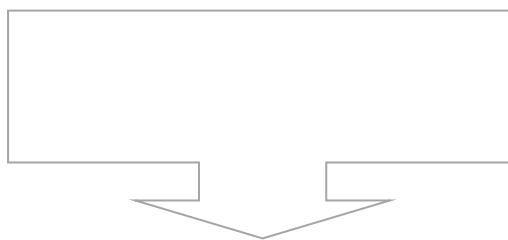
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'Boudou-Jacobs' or 'Boudou'

Search results, Geneva, WHO, 29 June 2023

<https://www.who.int/home/search?indexCatalogue=genericsearchindex1&searchQuery=%22Boudou-Jacobs%22&wordsMode=AnyWord>

The screenshot shows the WHO website's search results page. At the top, there's a navigation bar with 'Global' and 'Regions' dropdowns. Below this is the WHO logo and a main navigation bar with links to 'Health Topics', 'Countries', 'Newsroom', 'Emergencies', 'Data', and 'About WHO'. The breadcrumb trail reads 'Home / Search results'. The main heading is 'Search results'. Below this is a search bar containing the query '"Boudou-Jacobs"'. The results section states 'No results for Boudou-Jacobs'. At the bottom, there are three columns of links: 'Regions' (Africa, Americas, Eastern Mediterranean, Europe, South-East Asia, Western Pacific), 'Policies' (Cyber security, Ethics, Permissions and licensing, Preventing sexual exploitation, Terms of use), and 'About us' (Careers, Library, Procurement, Publications, Frequently asked questions, Contact us). The footer features the WHO logo and the text 'World Health Organization'.

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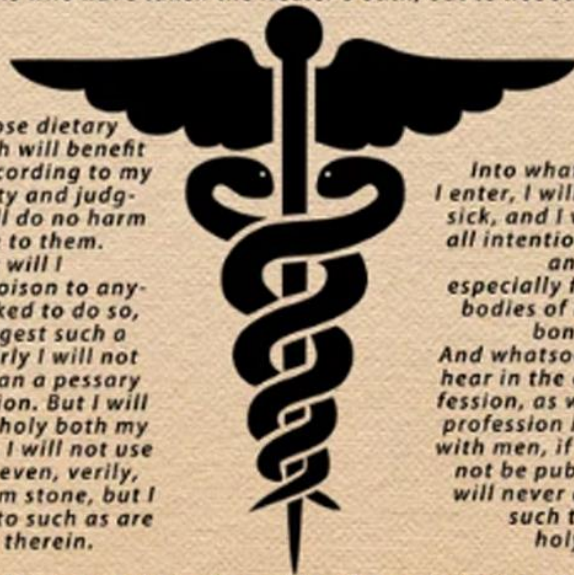
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World Health Organization

The Hippocratic Oath

I swear by Apollo Healer, by Asclepius, by Hygieia, by Panacea, and by all the gods and goddesses, making them my witnesses, that I will carry out, according to my ability and judgment, this oath and this indenture.

To hold my teacher in this art equal to my own parents; to make him partner in my livelihood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and to indentured pupils who have taken the Healer's oath, but to nobody else.



I will use those dietary regimens which will benefit my patients according to my greatest ability and judgment, and I will do no harm or injustice to them.

Neither will I administer a poison to anybody when asked to do so, nor will I suggest such a course. Similarly I will not give to a woman a pessary to cause abortion. But I will keep pure and holy both my life and my art. I will not use the knife, not even, verily, on sufferers from stone, but I will give place to such as are craftsmen therein.

Into whatsoever houses I enter, I will enter to help the sick, and I will abstain from all intentional wrong-doing and harm,

especially from abusing the bodies of man or woman, bond or free.

And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets.

Now if I carry out this oath, and break it not, may I gain for ever reputation among all men for my life and for my art; but if I break it and forswear myself, may the opposite befall me.